FANCEY, MARYA J., D.M.A. Practical and Pedagogical Intentions: New Perspectives on the Organ Masses from the Tablature of Johannes of Lublin (2019) Directed by Dr. André Lash and Dr. Andrew Willis. 174 pp.

The Tablature of Johannes of Lublin (1537-1548), originating from Kraśnik, Poland, is the largest sixteenth-century organ tablature. Its liturgical and secular repertoire is a key to understanding the development of European keyboard music, which began to exhibit an idiomatic style around 1550. Prior research on liturgical organ music has largely neglected this Polish manuscript, although it contains the largest number of organ masses from any single extant sixteenth-century source. This study examines these organ masses from the practical (their use in worship) and pedagogical perspectives using primary sources—sixteenth-century liturgical books and the Tablature's own treatise on improvisation and composition—to analyze liturgical aspects and musical style. This dissertation is organized around three topics: a distinct liturgical practice, a collaboration between two scribes, and a coherent musical style built upon the methods in the Tablature's treatise.

My findings offer new perspectives on the organ mass and musical transmission. The masses from the Tablature demonstrate a distinct, regional liturgical practice combining Central-European chant repertoire and Northern-tradition *alternatim* patterns. In the course of examining the original manuscript, I discovered that some of these organ masses contain the first documented collaboration by two scribes on the same musical work in a keyboard tablature. The treatise provides principles for improvisational composition on a chant; it is also the earliest extant instructional source on four-voice counterpoint at the keyboard. Its didactic approach is significant because it integrates techniques from vocal polyphony with

the Fundamentum approach in ars organisandi treatises. The masses exemplify all the methods in the treatise, thereby enriching the pedagogical value of the entire Tablature. Interpreting the masses' repertoire concordances with the treatise provides new information on musical transmission during the Renaissance.

This study also includes tables that summarize, update, and resolve issues in past research. All the original chants used in the Tablature's masses are now correctly identified according to sixteenth-century Polish sources. Scribal attribution of each folio in the manuscript is listed in appendix A. I supply the first complete table of *alternatim* patterns (musical exchanges between choir and organ) in all extant organ masses between 1500 and 1568. A supplement to this document provides a recording from a live performance of the three complete mass cycles with Flores Rosarum, directed by Dr. hab. Susi Ferfoglia, and cantor Łukasz Laxy at Holy Cross Catholic Church in Krakow, Poland on May 29, 2018.

My findings indicate that the organ masses from the Tablature of Johannes of Lublin demonstrate a consistent liturgical practice and exemplify a coherent compositional style arising from the distinctive pedagogy of the treatise.

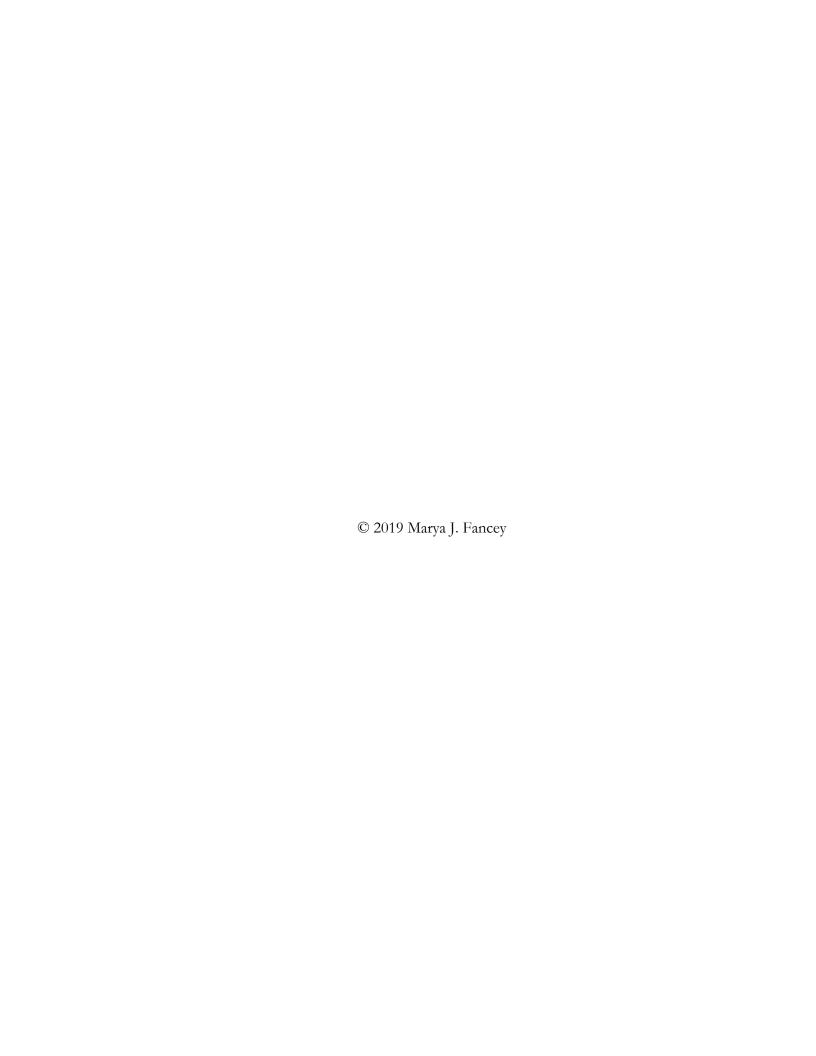
PRACTICAL AND PEDAGOGICAL INTENTIONS: NEW PERSPECTIVES ON THE ORGAN MASSES FROM THE TABLATURE OF JOHANNES OF LUBLIN

by

Marya J. Fancey

A Dissertation Submitted to the Faculty of The Graduate School at The University of North Carolina at Greensboro in Partial Fulfillment of the Requirements for the Degree Doctor of Musical Arts

> Greensboro 2019



To Jason, for your enthusiastic support of Polish music

APPROVAL PAGE

This dissertation written by MARYA J. FANCEY has been approved by the following committee of the Faculty of The Graduate School at The University of North Carolina at Greensboro.

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you to Artur Szczerbinin for assistance with registration changes, Łukasz Laxy for serving as cantor, and Michał Wolan for serving as calcant (bellows pumper). Thank you to Robin Hardman of Birdsong Video, Greensboro, N.C. for editing and processing my recording of the live concert.

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PREFACE

In April of 2012 I was in the Rynek Underground, an archaeological museum under the main square in the Old Town district of Krakow. Looking at a map of late-Medieval and Renaissance era trade routes, I wondered how these routes affected the musical culture of Krakow, especially organ music. Fourteen months later I began my doctoral studies and, remembering this museum visit, decided to investigate historical Polish organ music. My preliminary reading led me to the Tablature of Johannes of Lublin. The organ masses from this manuscript were a natural fit for my interest in historical liturgical music and past experience in performing seventeenth-century French mass components and hymns with a cantor. As my research progressed it became clear that I would need extended time in Poland for research. I was fortunate to receive a US Student Research award in Historical Music Performance from Fulbright Polska, the Polish-U.S. Fulbright commission. This grant supported my musicological and performance studies for the academic year 2017–2018. Dr. hab. Elżbieta Witkowska-Zaremba at the Polish Academy of Sciences in Warsaw directed my musicological work; Dr. hab. Marcin Szelest at the Academy of Music in Krakow directed my performance studies. My research received support from many individuals and institutions in Poland; they are listed in the acknowledgements.

This dissertation has a supplemental live recording of three mass cycles from the Tablature of Johannes of Lublin performed with Flores Rosarum, an all-female vocal ensemble (http://floresrosarum.pl), at a concert on May 29, 2018 at Holy Cross Catholic Church in Krakow. The decision to collaborate with an all-female ensemble for the performance is somewhat unusual because the Tablature of Johannes of Lublin originates

from a male monastery. Presumably the tonal centers of the versets (organ pieces) are intended for use with low voices, and performance with high voices can create problems in transposition. Additionally, women would not have sung publicly in a parish or cathedral. However, there is evidence that nuns in Polish convents were accomplished singers and did perform the mass in alternation between monody and polyphony (known by the Polish term *fraktowanie*). It may be a small stretch to extend this to a performance between monodic chant and polyphonic organ pieces, but there is no reason to exclude this possibility. My choice to collaborate with Flores Rosarum was also influenced by their impressive concert that I attended in December 2017. I was able to meet their director Susi Ferfoglia through Marcin Szelest, and she enthusiastically agreed to collaborate. This concert is likely the first public performance of these organ masses since the manuscript fell out of use in the seventeenth century.

At the time of the performance my research was in progress. Some of the performance decisions were intentional experiments, and I have since changed my mind after further research and reviewing the recording. For example, the second mass is listed as de Domenica and its Gloria was performed without the trope spiritus alme. However, two versions of this Gloria chant are found in Graduale de sanctis [The Graduale of Jan Olbracht, King of Poland, vol. II]—one with and one without the trope. The performance omits the troped text, but I now believe this is a Marian mass and would perform the troped Gloria, the text of which was included in the original program in appendix C. The correct name of this mass is de Domina; the reasons for this name change and its use as a Marian mass are discussed in ch. 2, section 2.6. There are additional differences between performance

decisions and the information in this study; for details see the introduction to appendix C. It was also necessary to replace some of the organ pieces from the live concert with better versions from a later recording session on June 19, 2018. The substitutions are noted in the track listing and copy of the program, also in appendix C.

No informed performance of historical music can ever be an authoritative recreation of the original. At best, the performers can offer their perspective on one possible interpretation. Yet this is still a valuable exercise because the music of the past is from a different culture and the performer can bridge the gap for the listener. My hope is that this recording will enhance the reader's understanding of this dissertation and spark an interest in the music from the Tablature of Johannes of Lublin.

TABLE OF CONTENTS

	Page
LIST OF TABLES	xi
LIST OF FIGURES	Xiii
CHAPTER	
I. INTRODUCTION	1
II. LITURGICAL ASPECTS	15
2.1 History of the Organ Mass through the Mid-Sixteenth Century	
2.2 Difficulties in Cataloging Individual Versets	
2.3 Problems in Chant Identification	
2.4 Chant Repertoire	27
2.5 The Cantus Firmi in Individual Organ Versets	
2.6 The Alternatim Patterns in European Organ Masses	37
2.7 The Liturgical Calendar and Chant Rubrics	
III. TWO SCRIBES AND THEIR COLLABORATION ON THE ORGAN	
MASSES IN TJL	61
3.1 Evidence for Two Scribes	61
3.2 Interactions between Two Scribes Evidenced in the Manuscript	65
3.3 Physical Evidence from the Manuscript and the Scribes' Relationship	72
<u>.</u>	
IV. PEDAGOGY AND MUSICAL TRANSMISSION	80
4.1 The Didactic Sections in TJL	80
4.2 Description of the Treatise Ad faciendum cantum choralem	82
4.3 The Organ Masses as a Pedagogical Device	
4.4 Connections between TJL and Other Polish Organ Tablatures	. 102
4.5 Repertoire Concordances among Polish Organ Tablatures	. 105
4.5.1 Concordances of opening material	. 106
4.5.2 A concordance using an altered compositional model	.114
4.5.3 Concordances after verset entrances	. 118
V. CONCLUSION	. 124
BIBLIOGRAPHY	. 127

APPENDIX A. TABLES)
APPENDIX B. FIGURES	7
APPENDIX C. CONCERT RECORDING164	1
APPENDIX D. COPYRIGHT PERMISSIONS	3

LIST OF TABLES

	Page
Table 2.1. Chant Identification in Organ Mass Items	25
Table 2.2. Chant Repertoire: Regions of Use and Rubrics	29
Table 2.3. Kyrie Alternatim Patterns	39
Table 2.4. Agnus Dei Alternatim Patterns	41
Table 2.5. Sanctus Alternatim Patterns	42
Table 2.6. Gloria Alternatim Patterns	45
Table 2.7. Credo Alternatim Patterns	50
Table 2.8. Possible Credo Alternatim Patterns in TJL	52
Table 2.9. The Italian Organ Mass Tradition	55
Table 2.10. Comparison of Mass Cycles in TJL to the Italian Organ Mass Tradition	56
Table 3.1. Names for the Different Scribes Found in TJL	62
Table 3.2. Folio Attribution to Secondary Scribe	66
Table 3.3. Description of Scribes' Collaboration	67
Table 3.4. Contents and Layout of Fascicle VII, Including [Missa] de Domina	75
Table 4.1 Location of Cantus Firmus (c.f.) in Organ Versets	92
Table 4.2. Comparison of Verset Entrance Types to the Principles in the Treatise *Ad faciendum cantum choralem	
Table 4.3. Concordances of Shared Musical Excerpts	107
Table A.1. European Sources of Organ Masses to 1550	139
Table A.2. Catalog of Organ Mass Versets in TJL (with chant identifications and compositional characteristics)	141

Table A.3. Alternatim Patterns in Sixteenth-Century Organ Masses and the Faenza Codex	146
Table A.4. Folio Attribution (attr.) to Each Scribe	154
Table A.5. Contents of the Treatise Ad faciendum cantum choralem	156

LIST OF FIGURES

	Page
Figure 2.1. Credo Versets Recombined to Create New Mass Items	21
Figure 2.2. Melodic Repetition and Paraphrase in Agnus Dei Chant SCB037	36
Figure 2.3. Verset by Buchner Showing Migration of the Cantus Firmus	47
Figure 2.4. Title of the Second Mass Cycle and Comparison of Similar Abbreviations	58
Figure 3.1. Comparison of Handwriting Showing Distinctive Letters by Both Scribes	64
Figure 3.2. Comparison of Two Identical Passages Showing a Layout Correction by Secondary Scribe	69
Figure 3.3. Detail from the Manuscript Showing a Second Ending by Primary Scribe	70
Figure 3.4. Comparison of Second Ending from <i>Qui propter nos</i> to mm. 23b–27 of <i>Qui sedes</i> & mm. 32b–35 of <i>Domine Deus</i>	71
Figure 4.1. Example 39 from the Treatise <i>Ad faciendum cantum choralem</i> in Its Correct Transcription	85
Figure 4.2. Beginning of Kyrie Ultimum from [Missa] de Domina, fol. 65v	95
Figure 4.3. Comparison of Imitative Entrances Based upon Kyrie cunctipotens genitor Deus (MEL018)	96
Figure 4.4. Detail from fol. 25r in TJL Showing Alteration to a Dotted Rhythm	98
Figure 4.5. Example 17 from <i>Ad faciendum cantum choralem</i> Showing an Ascending Scale Passing from Alto to Discant	99
Figure 4.6. Excerpt from Et in Terra pax de s[an]cta maria sabatinis diebus, fols. 224v–225r	100
Figure 4.7. Comparison of Scripts from Different Polish Tablatures	104
Figure 4.8. Comparison of Sanctus [Primum] from Two Sanctus Solemne Items	108

Figure 4.9. Comparison of Tercium Sanctus from Two Sanctus Solemne Items	111
Figure 4.10. Comparison of Et in terra pax Versets from TJL and TKD	116
Figure 4.11. Comparison of Similar Measures in Three Tercium Kyrie Versets from Kyrie fons bonitatis/virginitatis	120
Figure B.1. Transcription of <i>Credo</i> Chant MZG531B from PL-Kj-1267, fols.	158
Figure B.2. Transcription of <i>Credo</i> Chant MZG33B from PL-Kk-44, fols. 52v–54v	161

CHAPTER I

INTRODUCTION

Over the first half of the sixteenth century European keyboard music developed from improvisations and arrangements to "carefully crafted compositions that were committed to paper, copied, published, admired, and remembered." Moreover, developments achieved in the fifteenth century subsequently accelerated, resulting in the early beginnings of an idiomatic keyboard style by 1550. Keyboardists were competent on multiple instruments (clavichord, harpsichord, and organ), and written music typically did not specify the instrumentation. Keyboard repertoire comprised many genres ranging from the popular—dances and intabulations of songs—to the liturgical—motet intabulations and works based on chant. Most research on and performance of this repertoire prioritizes

Western Europe and largely ignores Polish sources. One understudied source, the *Tabulatura Joannis de Lublin* (1537–1548), otherwise known as the "Tablature of Johannes of Lublin" and hereafter referred to as "TJL," contains the largest collection of sixteenth-century European organ music, comprised of all genres of keyboard music in use at this time, plus three didactic portions.²

¹ Alexander Silbiger, "Introduction: The First Centuries of European Keyboard Music" in *Keyboard Music Before 1700*, ed. Alexander Silbiger, Routledge Studies in Musical Genres, ed. R. Larry Todd (New York: Routledge, 2004), 12.

² Johannes of Lublin, "Tabvlatvra Ioannis de Lyvblyn Canonic <orvm> Regvlarivm de Crasnyk 1540," MS 1716, The Scientific Library of the Polish Academy of Learning and Sciences, Krakow, PL-Kp-1716. The Latin title translates into Polish as "Tabulatura Jana z Lublina" and into English as the title given above or its alternate, the "Jan of Lublin Tablature." The different translations are used interchangeably in the published research. The manuscript is written in old German organ tablature consisting of a single staff line for the discant (highest voice) with the additional voices written underneath in a chart format (see figure 3.1 in ch. 3).

The TJL manuscript,³ compiled between 1537 and 1548, comprises 260 folios and originates from the monastery of the Canons Regular in Kraśnik, Poland.⁴ Its three didactic sections—a treatise on setting plainchant with examples (*Ad faciendum cantum choralem*), multiple sets of exercises (*Fundamentum*), and a short essay on organ tuning and temperament (*Ad faciendam correcturam*)—are found in separate non-consecutive fascicles, but appear to be complete entities.⁵ TJL's hundreds of compositions include dances, intabulations, preludes, and liturgical versets (short sectional pieces) based on chants for the Mass Ordinary, the Mass Proper, and Office. The quantity and variety of liturgical music and the didactic portions, which address the skills needed to play the liturgy, make TJL the ideal collection for the sixteenth-century church organist.⁶ The manuscript should not be dismissed as a local

Therefore, TJL's contents are often referred to as organ music even though the compositions could have been played on other keyboard instruments. The liturgical music was certainly intended for the organ. TJL is famous for its lack of bar lines; occasionally vertical lines clarify the alignment in crowded passages. Most old German tablature manuscripts use a grid format to provide bar lines, but TJL's use of spaces between columns recalls Arnolt Schlick's *Tabulaturen etlicher Lobgesang und Lidlein uff die Orgeln und Lauten* (Mainz: P. Schöffer, 1512). However, this print uses the white notation system from vocal polyphony.

³ Different parts of the Lublin Tablature manuscript were reproduced by multiple publishers over the last hundred years for various reasons, but no complete edition exists. The three most important reproductions—a transcription, a facsimile with thematic and alphabetical indexes, and a new complete edition of the didactic portions described later in this chapter—are Johannes of Lublin, *Tablature of Keyboard Music*, 6 vols., transcribed and ed. John Reeves White, Corpus of Early Keyboard Music, ed. Willi Apel (n.p.: American Institute of Musicology, 1964); Johannes of Lublin, *Tabulatura Organowa*, ed. Krystyna Wilkowska-Chomińska, Monumenta Musicae in Polonia, Seria B, vol. 1, ed. Józef M. Chomiński; (Warsaw: Polskie Wydawn. Muzyczne, 1964); Johannes of Lublin, *Tabulatura Joannis de Lublin: Ad faciendum cantum choralem, Fundamentum, Ad faciendam correcturam*, ed. and tr. Elżbieta Witkowska-Zaremba, English tr. Anna Maria Busse Berger, Monumenta Musicae in Polonia, Seria C: Tractatus de Musica (Warsaw: Instytut Sztuki Polskiej Akademii Nauk, 2015).

⁴ For most of the 20th century scholars presumed the manuscript had been compiled in Kraśnik, a small monastic outpost, but more recent research suggests strong ties to Krakow, including the possibility that individual works originated there and were brought to Kraśnik by Johannes of Lublin. See Zofia Dobrzańska-Fabiańska, "Johannes of Lublin's Tablature (1540) as a Subject of Research," *Muzyka* 60, no. 3 (2015): 86; Elżbieta Zwolińska, "Pytania o muzykę w kościele Mariackim w Krakowie w pierwszej połowie XVI stulecia i o postać Jana z Lublina" [Questions about music in St. Mary's Church in Krakow in the first half of the sixteenth century and the role of Jan of Lublin], *Muzyka* 63, no. 3 (2018): 32–35.

⁵ Elżbieta Witkowska-Zaremba, introduction to *Tabulatura Joannis de Lublin: Ad faciendum cantum choralem, Fundamentum, Ad faciendam correcturam* by Johannes of Lublin, ed. and tr. Elżbieta Witkowska-Zaremba, English tr. Anna Maria Busse Berger, Monumenta Musicae in Polonia, Seria C: Tractatus de Musica (Warsaw: Instytut Sztuki Polskiej Akademii Nauk, 2015), 29–31.

⁶ Musicians at the Kraśnik monastery continued to use the Tablature during the sixteenth and seventeenth centuries. See Dobrańska-Fabiańska, "Johannes of Lublin's Tablature," 89–90.

curiosity (see n. 4 above) because it demonstrates that international works were circulating in Poland in this era: John R. White, building on the work of previous scholars, identified fifty-five compositions as motet intabulations by fourteen different European composers. The prioritization of West European sources over TJL is unfortunate because its large collection of various genres offers ample opportunity to study the development of keyboard music.

We cannot afford to overlook any single region or genre because all known genres of early-sixteenth century keyboard repertoire contributed to the development of an idiomatic style. Just as TJL and other Polish sources have been neglected, research in organ and other keyboard literature has primarily focused on composers and large works at the expense of early-sixteenth century genres based on vocal music. This focus also prioritizes later centuries for, as John Shannon states, "The musical environment in which we have lived since the eighteenth century has left us with a bias in favor of instrumental music. . . . To the Renaissance musician, music did not stand as an art unto itself; it stood as a servant art to the master of word." In arguing for a new approach for keyboard music composed before 1700, Alexander Silbiger notes the limitations of twentieth-century approaches to the study of early music, as exemplified by the influential German-born and -educated musicologist Willi Apel (1893–1988):

... Apel's perspective on music history has become rather antiquated. In addition to the tendency to evaluate composers and their works as links in an evolutionary chain leading toward J.S. Bach, we should mention his excessive

⁷ John R. White, "The Tablature of Johannes of Lublin: Ms 1716 of the Polish Academy of Sciences in Cracow" *Musica Disciplina* 17 (1963): 138–142, accessed July 24, 2016, http://www.jstor.org/stable/20531970. All but one are vocal intabulations, and thirty-four works from the Tablature are also present in French, German, and Italian sources printed before 1548. Identification of motets began in 1909 with the work of Adolf Chybiński (listed in the bibliography), who also noted the international character of TJL's repertoire.

⁸ John Shannon, "Organ Music in the Late Renaissance" in *The Evolution of Organ Music in the 17th Century:* A Study of European Styles (Jefferson, NC and London: McFarland and Co., Inc., 2012), 5.

emphases on the value of originality—with the consequent devaluing of intabulations as "arrangements"—and on the formal aspects of compositions . . . even though for genre definitions in pre-1700 music, textures and cultural (or affective) associations may be more important than structural schemes.⁹

This exaltation of instrumental repertoire for historical keyboard instruments has skewed our understanding of Renaissance organ literature and organists. Advocating for increased research on *geistliche* (religious or sacred) repertory for both the organ and lute, Sarah Davies states: "The sacred repertory in the organ sources has been a topic of interest only insofar as its works could be verified as *not being based on vocal models* (emphasis mine)." Her argument for increased research on intabulated motets can also be extended to other keyboard genres influenced by vocal models from overlooked regions of Europe such as Poland. While TJL's sacred repertoire is too large and varied for a single study, a focus on a single sacred genre helps correct the general neglect of both Polish sources and sacred organ music.

⁹ Alexander Silbiger, "Introduction: The First Centuries," 19. Even as Silbiger argues for a new approach and defends intabulations of vocal works, his own editorial decisions in compiling *Keyboard Music Before 1700* still prioritize composers and non-liturgical works. This book is comprised of extended articles by different scholars for the following national traditions: England, France, Germany & the Netherlands, Italy, and Spain & Portugal. In the preface Poland and Scandinavia are described as lacking sufficient repertoire and significant keyboard figures to warrant inclusion. In an effort to counteract the risks of glossing over commonalities and cross-pollinations Silbiger gives a brief overview of the origins of keyboard music to 1600 in ch. 1. However, liturgical music has only a passing mention in this chapter, and there is no mention of TJL, *even though it is the largest collection of its time and contains compositions from all contemporaneous genres of keyboard music.*Throughout the whole book, liturgical music receives far less attention than other genres, with the exception of the chapter on France by Bruce Gustafson. Even here, the information focuses on seventeenth- and eighteenth-century organ masses, although, in this case, it is a result of the larger number of surviving sources and supplemental records in comparison to the sixteenth century.

¹⁰ Sarah Davies, "Resonet in Laudibus: The Geistliche Repertory in Organ and Lute Tablatures of the Deutsches Sprachgebiet, c.1510-1590" (PhD diss., New York University, 2010), 5, ProQuest (UMI 3427921). She continues: "Accordingly, with most of the repertory shelved as insignificant, an attempt to find an origin for the organ chorale prelude before 1600 has been doomed to failure. These attitudes reflect a hold-over of nineteenth- century thinking, where the lute was associated with a secular and abstract repertory into which the intabulated motet did not comfortably fit, and the organ was associated with original works of genius, in which there was no place for 'lifeless' and 'mechanical' transcriptions of text-based works encrusted with 'tasteless' ornamentation." Davies presents the history of and gradual progress of research on intabulated motets in Chapter 1 of her dissertation and argues convincingly for a reassessment of this previously dismissed repertoire.

Chant-based genres from TJL are a particularly good candidate for study because they borrow from a vocal source (the plainchant) but are created as idiomatic organ works, unlike intabulations. Improvisation on a borrowed chant during the liturgy, often set as a cantus firmus, was a universal practice throughout Europe and predates the earliest extant sources from the fifteenth century. Thus, borrowed chants can provide a starting point for a comparison of organ works from TJL with those from other regions, especially regarding different settings of the same melody.

One chant-based genre is the organ mass, a set of versets for a component of the mass, often from the Mass Ordinary, intended for performance with the choir. The conventional narrative of its history and development focuses on information from extant French and Italian sources from the mid-sixteenth through eighteenth centuries. While this focus is understandable due to the larger number of surviving sources in comparison with other regions and earlier centuries, this emphasis has created a self-reinforcing loop that continues to prioritize these sources. Polish sources containing similar repertoire receive only a brief mention in English-language surveys of keyboard music and organ literature, and the organ masses from these sources are not discussed in any detail. The self-reinforcing loop has resulted in an incomplete narrative on the development of the organ mass.

¹¹ All components from the various types of liturgy use versets; organ masses consist of versets for the Mass Proper or the Mass Ordinary and developed out of the increasing use of the organ in liturgy during the Middle Ages. They were likely part of the organist's responsibilities before the first surviving written examples from the early-fifteenth century. See Clawson Young Cannon, Jr., "The 16th- and 17th-Century Organ Mass: A Study in Musical Style" (PhD diss, New York University, 1968) 13–17, ProQuest (UMI 6907938).

¹² See Edward Higgenbottom, "Organ Music and the Liturgy" In *The Cambridge Companion to the Organ*, ed. Nicholas Thistlethwaite and Geoffrey Webber (Cambridge: Cambridge University Press, 1998), 130–147; Bruce Gustafson, "France," in *Keyboard Music before 1700*," edited by Alexander Silbiger, (New York: Routledge, 2004) 90–146; Higgenbottom is also the author of the New Grove article on the organ mass.

¹³ F.E. Kirby implies that the Polish sources are indistinct from German in *A Short History of Keyboard Music* (New York: Free Press, 1966), 41–42. Kirby ignores the fact that the scholars to whom he refers never

Although research on the organ mass has gradually increased in the last several decades, ¹⁴ much work remains. Studies on chant repertoire used in European organ masses frequently rely on twentieth-century editions of liturgical books, such as the *Liber Usualis* (1961) and *Graduale Romanum* (1974), rather than regional, contemporaneous sources. Moreover, to the best of my knowledge, there are no studies comparing chant repertories used in organ masses across different regions. Existing research on other liturgical aspects often excludes or minimizes the organ masses from TJL and other Polish sources. For example, Apel's analysis of *alternatim* practice—the textual phrase alternation between organ versets and the choir—in the *Gloria* does not include the organ masses from TJL. ¹⁵

Past research focused on TJL also has not examined its organ masses to the fullest extent, despite their world-wide availability in a transcription for the *Corpus of Early Keyboard Music* (CEKM) since 1964. The original manuscript has been studied, primarily by Polish scholars, since the first decade of the twentieth century. The bulk of this research has focused on 1) publications of the manuscript in multiple formats (see n. 3 above), 2) introductory surveys including a codicological study (physical examination of the manuscript

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categorized these Polish sources as German. John White's catalog from 1963 shows the international character of the manuscript and groups some compositions as Polish in origin ("The Tablature of Johannes of Lublin,"144–162). Corliss Richard Arnold's survey repeats Kirby's error, stating "Two Polish tablatures were written under German influence" in *Organ Literature: A Comprehensive Survey*, 3rd ed., 1st paperback ed. (Lanham, Md.: Scarecrow Press, 2003), 12. The first edition of this survey was published in 1973, after an article by White in 1968 that specifically addressed original Polish compositions in TJL. See White, John R. "Original Compositions and Arrangements in the Lublin Keyboard Tablature," in *Essays in Musicology: A Birthday Offering to Willi Apel*, 83-92 (Bloomington: Indiana University, 1968).

¹⁴ For example, Bernadette Nelson, "Organ Music for the Mass in Spain, from the Sixteenth to the Eighteenth Centuries," *Journal of the Royal College of Organists* (2003): 56–65; William P. Mahrt, "The *Choralis Constantinus* and the Organ" in *Heinrich Isaac and Polyphony for the Proper of the Mass in the Late Middle Ages and Renaissance*, ed. David J. Burn, and Stefan Gasch (Turnhout, Belgium: Brepols, 2011): 141–156.

¹⁵ Willi Apel, *The History of Keyboard Music to 1700*, trans. and rev. by Hans Tischler (Bloomington, IN and London: Indiana University Press, 1972), 93. More recent research expands Apel's work but still focuses on West European sources. See Silbiger, *Keyboard Music before 1700* and Higgenbottom, "Organ Music and the Liturgy".

¹⁶ Johannes of Lublin, *Tablature of Keyboard Music*, ed. White (see n2).

music, and 4) detailed work on the theoretical treatise and *Fundamentum*.¹⁷ To date, the liturgical works have only been included in the context of surveys of the entire manuscript. Barbara Brzezińska's monograph on the four extant Polish organ tablatures before 1550 discusses the organ masses in the larger contexts of their function within the liturgy and their classifications as works based on a cantus firmus. This Polish-language monograph provides the most complete discussion of *alternatim* patterns with chant identification to date. However, many questions and gaps regarding liturgical practice remain because the scope of her study was too broad for a detailed analysis of the organ masses.¹⁸ For example, she was unable to identify several cantus firmi in the Mass Ordinary versets. More recently, Grzegorz Kos examined *Kyrie paschale* versets, but the works included in this study comprise only a small subset of organ masses from TJL.¹⁹ Because TJL is the largest collection originating from a crucial period in the development of idiomatic keyboard repertoire, detailed study of its liturgical works, particularly the organ masses, holds great potential.

How does detailed study of the organ masses from the Tablature of Johannes of Lublin contribute to an understanding of the development of organ literature in Europe between 1500 and 1550? These organ masses can inform us about liturgical practice, musical transmission, and pedagogical practice in sixteenth-century Poland. This information will

¹⁷ For a detailed review of the research on TJL through 2015 in English, see Dobrzańska-Fabiańska, "Johannes of Lublin's Tablature," 69-96.

¹⁸ Barbara Brzezińska, Repertuar polskich tabulatur organowych z pierwszej połowy XVI wieku. [Repertoire of Polish organ tablatures from the first half of the sixteenth century] (Kraków: Polskie Wydawnictwo Muzyczne, 1987).

¹⁹ Grzegorz Kos, "Kyrie paschale' in Polish Organ Tablatures from the First Half of the 16th Century—Problems of Style and Attribution," Muzyka 41, no. 3 (2016): 3–44. Kos investigated the issues of chant, intabulation, authorship, and style of all Kyrie paschale versets found in several Polish organ tablatures, including those in TJL, in the context of his research on Heinrich Finck. His work focused on the connections to extant vocal masses. See also section 4.5.3 "Concordances after verset entrances" in ch. 4.

contribute to a better understanding of the history of the organ mass, in turn adding to existing knowledge of the development of keyboard literature. In this paper, I investigate how the chant serves as generative material in an organ mass,²⁰ and how contemporaneous primary sources such as liturgical books and theoretical treatises can be used to analyze them.

My detailed study of TJL's organ masses fills lacunae in research on repertoire from this manuscript, as well as Renaissance organ literature and liturgical customs more generally. The relatively small number of surviving sources of organ masses before 1550 increases the value of those from TJL. As shown in table A.1 in appendix A, the organ masses from TJL constitute a sizeable portion of the total extant organ masses. TJL provides three of twelve complete mass cycles (25%) and fourteen of forty-eight independent mass items (29.2%), including fragmentary ones. Understanding of the similarities between organ masses from TJL and those from other regions of Europe has the potential to answer questions in the specialized area of the organ mass as well as the larger development of keyboard music. Due to a lack of surviving German sources of organ music between 1520 and 1570, nothing is known from German-speaking regions during this time. Additionally, concordances between TJL and other extant Polish tablatures have been documented but not fully explored. The connections between TJL's musical style, other extant Polish tablatures, and German sources elucidate the development of idiomatic keyboard music.

²⁰ "Creating a brief fantasy or setting a cantus firmus were skills organists drew upon for one of the most common tasks they faced when accompanying a church service: the production of versets for *alternatim* performance with the choir." Alexander Silbiger, "Performance Practice" in *Keyboard Music before 1700*, ed. by Alexander Silbiger (New York: Routledge, 2004), 363. See also Higgenbottom, "Organ Music and the Liturgy," 140. The description of audition requirements for St. Mark's in Venice includes improvisation on a cantus firmus.

This study makes research published in Polish accessible to English-language academic circles. Much existing research about TJL has been hidden in plain sight because most English-speaking scholars cannot read Polish. This research forms a solid foundation for a study of the organ masses. New publications and sources produced during the past two decades range from research on TJL to digital scans of sixteenth-century liturgical books. Eva Zielińska's monograph provides information on the musical culture at the monastery of the Canons Regular in Kraśnik, the origin of TJL.²¹ Two recent articles from 2018 provide valuable contextual information on organ culture and additional evidence for a Krakow connection to TJL.²²

Elżbieta Witkowska-Zaremba's new edition of the three didactic sections from TJL is a particularly important precursor to a study of the organ masses because it is the first to transcribe and translate the Latin prose into English and to publish all of these sections with their musical examples. (Previous editions of TJL did not present them in their entirety.) The treatise Ad faciendum cantum choralem teaches the principles of setting a chant as a cantus firmus in an organ verset, therefore it can be used to interpret the organ masses from the perspective of the scribes who compiled TJL. Ad faciendum cantum choralem is the only known source for instruction on four-part contrapuntal keyboard texture of its time. Other regions of Europe had also developed a similar four-part style in their organ masses, but they have

²¹ Ewa Zielińska, Kultura Intelektualna Kanoników Regularnych Z Klasztoru W Kraśniku W Latach 1469–1563 [Intellectual Culture of the Canons Regular from the Monastery at Kraśnik in the Era 1469–1563] (Lublin: Uniwersytetu Marii Curie-Skłodowskiej, 2002).

²² Elżbieta Zwolińska, "Pytania o muzykę," 3–41; Jerzy Rajman, "Wkład klasztorów w rozwój kultury organowej średniowiecznej i wczesnonowożytnej malopolski (XIV–koniec XVI w.)" [The contribution of monasteries to the development of organ music culture of Malopolska in the Medieval and Early Modern Periods (from the Fourteenth to Late-Sixteenth Centuries)], *Muzyka* 63, no. 3 (2018): 43–64.

left no surviving teaching methods. The instruction portion of the *Fundamentum* (ca. 1510)²³ by Hans Buchner teaches only three-part counterpoint, although many supplemental pieces are in four parts.

In summary, TJL's organ masses have not been sufficiently studied, particularly their correlation with the treatise, *Ad faciendum cantum choralem*. My findings indicate that the organ masses from the Tablature of Johannes of Lublin demonstrate a consistent liturgical practice and that they exemplify a coherent compositional style arising from the distinctive pedagogy of the treatise.

TJL contains complete and incomplete organ masses, thus definitions are needed for clarification.²⁴ **Organ mass,** as used in the literature, can imply a set of versets for an independent component, e.g. *Kyrie,* or a matched set of two or more components. Therefore, I will distinguish between the different usages of the term as follows: An **item** is set of versets for an independent component *only*, and a **mass cycle** is a complete set of items. Although TJL contains items for the Mass Proper, they are outside the scope of this study; therefore, my usage of the terms "organ mass," "mass item," and "mass cycle" will apply only to Mass Ordinary versets. The term **verset**, which originates from the phrase (verse) of text with its borrowed chant melody, always refers to the organ's part, not the choir's sung phrase of text. **Cantus firmus** is the term for the chant melody in the verset; the technique

²³ There is no autograph copy of the *Fundamentum* by Buchner, but copies of his compositions and compositional treatise are found in three manuscripts: Basel F1 8a (c. 1551) and Zurich 284a–b (c. 1546–47). The version of the compositional treatise in Zurich 284a–b is only a fragment. 1520 and 1525 are frequently cited as the original dates of the treatise and accompanying exercises. However, Davies presents a strong argument for 1510, "Resonet in Laudibus" 3n7. The only other organ masses from extant sixteenth-century German sources are found in Regensburg 21 (c. 1575–90), a manuscript from Neresheim Abbey near Augsburg. Davies, "Resonet in Laudibus," 251.

²⁴ This dissertation is written for a broad audience. For the benefit of the novice reader, I regularly define common terms in the text and provide field-specific background information in the footnotes.

of setting it in equal note values is *cantus planus*. My study of chant repertoire uses catalogs of a variety of liturgical books (e.g. graduals, missales, antiphonals), but my comparisons of the cantus firmi to chant melodies uses graduals only. Thus, the phrase **liturgical books** applies to information gathered from a variety of sources; the term **gradual** clarifies the context and indicates that other sources were not consulted.

Keyboard music in the early sixteenth century generally arose from improvisation; most, if not all, compositions are refined, written-out improvisations, often used as models for other musicians. Therefore, any discussion of composition and principles of composition cannot be divorced from their origin as improvisations. Sometimes the terms "composition" and "compositional" are used alone, but the reader should keep in mind the symbiotic relationship with improvisation; musicians at this time were capable of improvising multi-voice counterpoint resembling the surviving written-out compositions. All the organ mass versets in TJL are, in a sense, improvised compositions.

This study is primarily based on firsthand examination of primary sources; their RISM sigla are included in the bibliography when applicable. I used the original manuscript of TJL as well as selected digital photographs and the published facsimile. For two additional Polish organ tablatures, I consulted digitized photographs of the originals, accessing those for PL-Wn Mus. 2081 Cim online and those for PL-Wp-3141 at the Library of the Institute of Art, Polish Academy of Sciences, Warsaw. The original manuscript of the Holy Ghost Tablature (*Tabulatura organowa z biblioteki klasztoru świętego Ducha w Krakowie*) is lost;²⁵ I consulted photographs generated from the microfilm available at the Institute of Art of the

²⁵ See ch. 2, n13.

Polish Academy of Sciences in Warsaw and a digitized version of the microfilm available online. I used microfilms and digital scans for all sixteenth-century liturgical books; the specific sources consulted are listed in the section "Primary Sources and Modern Editions" in the bibliography. Because the transcription in CEKM and the facsimile edition from 1964 have some problems, I made a critical edition of all three organ mass cycles and individual mass items; ²⁶ all uncited musical examples from TJL in this paper are taken from my edition. A performance of the three mass cycles with Flores Rosarum (see preface and appendix C) also informed my research.

Comparisons to extant organ masses in non-Polish sources use the modern editions listed in the bibliography, although reproductions of early prints were consulted when available. While this study limits the stylistic comparison of the organ masses from TJL to others originating between 1500–1550, three additional sources of organ masses are included in the examination of *alternatim* patterns (see notes to table A.1 in appendix A).

TJL contains 89 versets for the Mass Ordinary, but this number is misleading due to duplicated versets found in different mass items. Creating a catalog of the versets is further complicated by subtle differences in the duplications. My cataloging method and results are further discussed in section 2.2 of ch. 2; my catalog of the Mass Ordinary versets, is found in

²⁶ I began with the transcription (White, ed., *Tablature of Keyboard Music*) and, although I agree with many of White's editorial corrections, I found and corrected some mistakes. The facsimile (Wilkowska-Chomińska, ed., *Tabulatura Organowa*) also cannot be used as an authoritative edition. At a conference in Warsaw on the 50th anniversary of the series *Monumenta Musicae in Polonia*, Professor Zygmunt Szweykowski recalled that this project had technical difficulties and therefore the quality of the facsimile suffered. This holds true with my own observations: often the resolution is less clear than the original, and sometimes the photographs are marred. For example, a thick diagonal line cuts through the beginning of the second system on fol. 144v in the facsimile, but this line is not in the original. I thank Marcin Szelest for conveying Professor Szweykowski's remarks. Marcin Szelest, email message to author, April 15, 2019.

table A.2 in appendix A. More detailed information about other methods employed in the study are provided in the relevant chapters.

Several editorial decisions should be briefly explained. "Germany" is shorthand for the German territories of Europe according to early-sixteenth century borders and does not designate a unified country; likewise for the term "Italy." I always refer to the city Kraków as "Krakow," not the older term "Cracow," unless I am quoting a source that uses the older term; I use "Cracovian" for the adjective. Abbreviations for Polish organ tablatures are the same as those used by European researchers and are derived from their names in Polish; due to grammatical differences these abbreviations may appear unrelated to their English translations—for an example see ch. 2, n. 13. These and other specialized abbreviations are explained within the text when first used; those in tables are provided in keys. All other abbreviations in the text follow the standard in the Chicago Manual of Style. All pitch letter names use scientific pitch notation in which middle C equals C4.

Chapter 2 will discuss liturgical aspects of the organ masses: chant repertoire, alternatim patterns, and the functions according to the liturgical calendar. I will address issues in past identification of chant repertoire, provide a complete list of the chants used in TJL's organ masses, and discuss commonalities and differences with pan-European chants. The phrases of text corresponding to the cantus firmi in the organ versets can establish the alternatim patterns in the organ masses. I will compare the patterns found in TJL to those in other contemporaneous sources. Although the Mass Ordinary is a constant text used for every mass, the chants accompanying these texts varied throughout the liturgical year. I will discuss the functions of different organ masses using the designations for their corresponding chants as found in sixteenth-century liturgical books.

In the course of this study, I observed patterns in the handwriting that related to unresolved issues of scribe identity in the manuscript. These patterns revealed important information regarding musical transmission. Chapter 3 reviews the past research on scribe identification and presents new observations on folio attribution. These new observations establish that two scribes were involved in the portions of the manuscript containing the organ masses. I will discuss the evidence for their collaboration and its significance in musical transmission.

Chapter 4 provides a more detailed description of the didactic sections. It compares the organ masses to the principles in the treatise *Ad faciendum cantum choralem*. The similarities indicate that the organ masses can be considered full-length exemplars of these principles, thereby enhancing the pedagogical value of TJL as a collection. These similarities extend to the three other extant early-sixteenth century Polish organ tablatures. I will discuss these similarities as well as concordances in musical material among multiple sources. This discussion provides new information on pedagogical practice and musical transmission.

CHAPTER II

LITURGICAL ASPECTS

The organ masses from TJL cannot be properly understood without examining their liturgical context. Because the masses come from a working musician's document, an investigation of the liturgical aspects can provide insight into the relationship between music and ritual. These aspects are chant repertoire, *alternatim* patterns, and rubrics (brief inscriptions specifying the chants' appropriate use in the liturgical calendar). The masses in TJL constitute a significant sample size, thus observations can be assumed to represent liturgical practice in Poland. The organ mass developed over centuries in multiple regions; although there is a common foundation, there is no one "correct" type of organ mass.

2.1. History of the Organ Mass through the Mid-Sixteenth Century

The organ mass developed from *alternatim* practice in which the choir alternated between plainchant and polychoral settings in successive phrases of text. When the organ is used, it typically substitutes for the polyphonic settings of the choir, allowing churches with fewer resources to enhance the liturgy, although alternation between the organ and

¹ Although the organ mass developed from vocal masses, the two genres co-existed for several more centuries and developed in different ways. *Alternatim* was also used for items for the Mass Proper items (introits, sequences) and the Office (hymns). See also Higgenbottom, "Organ Music and the Liturgy."

² "No doubt the practice [alternatim] had its beginnings as much in the desire to elaborate the simple chant without the forces and skill of a polyphonic choir as in the desire of the organists to assert themselves. In any event, two ends were served: the organ found a vital liturgical function and the service could be varied with minimum expenditure of effort." Shannon, "Organ Music in the Late Renaissance," 23. See also Dobrzańska-Fabiańska, "Johannes of Lublin's Tablature," 94.

polyphonic choral settings is also possible.³ As will be seen in this chapter, the division of text phrases within a component has varied according to region, but a common arrangement is organ for the first phrase, choir for the second, and so on. Regardless of the text division, a mass item almost always has multiple versets for the organ.

The extant sources of organ masses through the mid-sixteenth century represent a small fraction of a mostly improvised repertory begun well before the fifteenth century. A complete list of the sources of all organ masses before 1550 is found in table A.1 in appendix A.4 The earliest organ masses are preserved in the Faenza Codex (ca. 1420–30),⁵ an anonymous Italian source containing the oldest known liturgical organ music, as well as intabulations of vocal works. The organ masses comprise *Kyrie* and *Gloria* settings in which the tenor has the chant in *cantus planus* while a florid discant (soprano) line is played above.⁶ Several other surviving manuscripts from the early-fifteenth century also contain liturgical organ music, but none are complete mass cycles. A supplement to the motet manuscript (A-Wn-3617) contains a *Kyrie magnae Deus*. A fragment (PL-WRu-I Q 438a) from Sagan (Żagań in Polish) contains a partial *Gloria*.⁷ The musical portion of a collection of sermons

³ "... it is very likely that Isaac's *alternatim* masses were composed as the alternate verses of the organ mass, and the resulting performance was entirely polyphonic, organ alternating with polyphonic choir." Mahrt, "The *Choralis Constantinus* and the Organ," 143.

⁴ The focus of this study is on organ masses between 1500 and 1550, but several sources post 1550 are included for comparison in determining *alternatim* patterns—this inclusion augments the small data set of masses before 1550. These additional sources were not used for stylistic comparisons. These sources provide the *Kyrie* items by Antonio Cabezón and the mass cycles by Andrea Gabrieli and Claudio Merulo.

⁵ The *Kyrie* and *Gloria* items in Faenza are considered mass cycles, even though they lack a *Sanctus* and *Agnus Dei*. One earlier and several contemporaneous sources only provide single mass items so Faenza is still considered the earliest source of mass cycles.

⁶ Kristin Holton Prouty, "The Italian Organ Mass: Bridging the Gap between Faenza Codex (c.1430) and Fiori musicali (1635)" (D.M.A. diss., Arizona State University, 2015), 5, ProQuest Dissertations & Theses Global

⁷ A digitized version is available here: http://www.bibliotekacyfrowa.pl/dlibra/doccontent?id=27370. Polish and German cultures coexisted in Sagan. From the thirteenth through fifteenth centuries, it was ruled by dukes in the Piast dynasty, thus placing it under Polish rule. In 1472, it was sold to Ernest, Elector of Saxony and Albert III, Duke of Saxony.

(D-B theol.q.290) contains a *Sanctus* and *Credo*. The texture and compositional technique in all three sources are similar to that seen in the Faenza Codex.

Surviving sources from the first half of the sixteenth century provide the first full organ mass cycles. The Italian tradition is represented by two sources: *Intabulatura d'Organo* – *cioè Misse*, *Himni*, *Magnificat* [. . .] *Libro Secondo* by Girolamo Cavazzoni (Venice: before 1549) and the masses found in the *Castell' Arquato* manuscripts (ca. 1530–1550). Two additional mid-sixteenth century sources (see note to table A.1), *Messe d'Intavolatura d'organo* (1568) by Claudio Merulo and *Libro quarto delle sue Tabuladure* (before 1585, published posthumously ca. 1593–1605) by Andrea Gabrieli, share similar *alternatim* patterns and are based on the same sets of chants. These four sources provide a clear picture of a codified Italian organ mass style.

Assembling a clear complete picture for other regions in Europe is difficult because only one source is available for each region. From France there are the two anonymous masses published by Attaingnant in *Tablature pour le jeu D'orgues: Espinetes et Manicordions sur le plain chant de Cunctipotens et Kyrie fons* [. . .] (Paris: 1531). English manuscripts supply a *Missa in Die Sanctae Trinitatis* by Philip ap Rhys, two anonymous *Kyrie* items, and an *Agnus Dei* by John Redford. The earliest Iberian source containing masses preserves only several *Kyrie* versets by Cabezón in *Obras de musica*, published posthumously in Madrid in 1578. The only extant

⁸ The portions from *Castell' Arquato* containing organ masses are from the mid-sixteenth century, but the multi-volume manuscript spans the early-sixteenth to early-seventeenth centuries.

⁹ Missa in Die Sanctae Trinitatis is found in GB-Lbma Additional 29996; the Kyrie items are in GB-Lbma Royal Appendix 56 and GB-Och mus. ms. 371; the latter source also contains Redford's verset.

¹⁰ Cabezón died in 1566. Although no other earlier sources of organ mass versets from the Iberian region survive, Juan Bermudo's *Comiença el libro llamado Declararación de inst[r]umentos musicales* (Osuna, 1555) refers to 'mass cycles' and recommends transpositions for them, indicating that organists played the mass in *alternatim*. Bernadette Nelson, "Organ Music for the Mass in Spain," 64n7.

German organ masses are found in addenda to the *Fundamentum* by Buchner (see ch. 1, n. 24), providing multiple settings of all mass items except the *Credo*. There are four *Kyrie*, four *Gloria*, five *Sanctus*, and five *Agnus Dei* mass items. One set of mass items is organized into a mass for Pentecost. Some of the others can also be organized into complete mass cycles. The number of versets and variety of chants provide an adequate representation of the German organ mass, although they are all by one composer.

Four Polish sources contain versets for the Mass Ordinary, and TJL provides the largest number of organ masses—more than any other contemporaneous European source. There are three complete mass cycles and many additional mass items: eight for the *Kyrie*, one *Gloria*, one *Credo*, and two each for the *Sanctus* & *Agnus Dei*—the latter is entered in the manuscript as a companion to the *Sanctus*. Il Identification of their cantus firmi shows a wide variety of chants covering the most important feasts in the liturgical calendar. Some mass items are identified with the initials N.C. or N.Z. but most are anonymous. In Poland. The Holy Ghost Tablature (ca. 1548, also known as the Cracow Tablature and henceforth abbreviated as TKD) provides three *Kyrie*, two *Gloria*, and three *Sanctus* mass items, but no *Credo* or

¹¹ This tally does not include the duplicated *Kyrie* and *Credo* mass items (see sec. 2.2). The complete listing of versets in table A.2 in appendix A combines duplicates to distinguish between different settings of the same chant and settings that transpose or otherwise copy another verset. If duplicates are considered separate items, the number of *Kyrie* items increases to eleven and the *Credo* items to two.

¹² Studies of the 'Polish' music in TJL focused on repertoire signed with these initials; they are also found on some motet intabulations and other works. N.C. is believed to be Nicolaus Cracoviensis, a Cracovian composer of the early-sixteenth century. Mikolaj (Nicolaus) of Chrzanów, another composer active in Krakow, signed his works N.Z. Dobrzańska-Fabiańska summarizes the research pertaining to these composers and works marked with their initials in "Johannes of Lublin's Tablature" (72–76).

¹³ The abbreviation TKD, taken from the Polish title of the manuscript (Tabulatura organowa z biblioteki klasztoru świętego Ducha), is used here to maintain consistency with past published research, the vast majority of which is in Polish. The original manuscript originated from Krakow but was deposited in the National Library of Poland. It is presumed destroyed in WWII, but a microfilm survives. A digitized microfilm

Agnus Dei settings. 14 Some of the mass items in TKD are copies of those found in TJL, and these duplications will be discussed further in chapter 4 (Musical Transmission and Pedagogy). The last two sources are fragments: the Augustinian fragment (The National Library of Poland, Warsaw, Mus. 2081, wooden board) and a tablature originating from Lwów (The Warsaw Public Library, ms. 3141, 19 unbound folios). They do not have any complete mass items but the first contains the beginnings of four versets for a *Kyrie* and the second has three measures of the first verset for a different *Kyrie*. Although they do not provide additional repertoire, they share the same texture and style found in TJL.

A survey of the extant organ masses to 1550 shows that, although they developed more complex textures and structures over time, they share many similar liturgical aspects. Organ masses from the early-fifteenth century were two-voice compositions; by 1550, four voices in the style of vocal counterpoint was the norm. These developments will be discussed further in the section on compositional style in ch. 4. All the extant organ masses comprise multiple versets based on a cantus firmus borrowed from chant to be used in *alternatim* with the choir. However, a comparative analysis of the chant repertoire and *alternatim* patterns shows regional differences across Europe, particularly in Poland.

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is available at https://polona.pl/item/tabulatura-organowa-z-biblioteki-klasztoru-sw-ducha-w-krakowie,OTMyMDY1OTk/. Research on TKD refers to the original manuscript by continuous page numbers, rather than folio numbers.

¹⁴ In Wyatt Marion Insko, "The Cracow Tablature with Transcriptions" (PhD. diss., Indiana University, 1964), these mass items are organized into two incomplete mass cycles, but this grouping does not reflect the layout in the manuscript. Additionally, Insko includes three motet intabulations of mass texts—a *Benedictus* by Isaac and two different intabulations of Josquin's *Cum Sancto Spiritu*—in his list of organ mass versets. I do not consider these three intabulations to be part of the other organ mass items in TKD because they are not settings of a chant from the Mass Ordinary created specifically for the organ.

¹⁵ A digital image of PL-Wn Mus. 2081 is available at https://polona.pl/item/tabulatura-organowa,MzYzODgwOTc/0/#info.

¹⁶ As the organ mass developed in later centuries, especially in France, setting a borrowed chant as a cantus firmus became optional. Free compositions were substituted but still performed in *alternatim*.

2.2. Difficulties in Cataloging Individual Versets

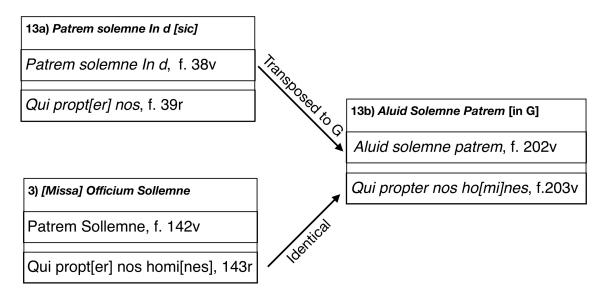
It is difficult to catalog the 89 individual versets comprising TJL's mass items and cycles because some versets are duplicated in the manuscript. With the exception of one verset (*Qui propter nos* on fols. 143r and 203v), these duplications are transpositions, sometimes with additional modifications. White often chose to combine duplicates into single versets. However, his editorial decisions sometimes obscure nuanced differences seen in the original manuscript. His merged versets cannot show a bass line modified to fit the key compass of the organ—a common occurrence in transpositions at the fourth or fifth. Some versets contain extra measures in comparison with their counterpart. In some instances White chose not to combine versets, for example the duplicated *Qui propter nos* mentioned above, and provided a footnote containing the cross reference. Thus, the transcription in CEKM does not provide an accurate catalog of all the versets.

Further complicating the issue is that often the duplicated mass items do not share all their versets. In many cases only one or two versets are duplicated while the others are distinct settings not found elsewhere in the tablature. Three *Credo* settings based on the same chant illustrate this complication. Although they are arranged as three mass items, there are only four unique versets total: two each of *Patrem* and *Qui propter nos*. Figure 2.1 shows how two mass items are reconfigured to produce a third *Credo*; one of these versets has not been transposed. The *Kyrie paschale* versets are particularly complicated. As seen in the catalog of versets in table A.2 in appendix A, two individual versets are found three times (the first *Kyrie* 6.01, 6.05, & 6.07 and *Kyrie Tercium* 6.02, 6.06, & 6.08); each pair is in a different key.

¹⁷ White, Tablature of Keyboard Music, no. 6, vol. 1.

Other settings with the same title are distinctly different, such as group no. 5 on fols. 81v–82r.

Figure 2.1. *Credo* Versets Recombined to Create New Mass Items. The numbering corresponds to the group and verset as listed in appendix A, table A.2. Catalog of Organ Mass Versets in TJL.



My solution to these difficulties is an updated catalog of versets that lists each one while simultaneously indicating duplicates. The group number preserves mass items and cycles as complete entities. The multiple items in the mass cycles share the same group number to distinguish them from individual items. The title code provides a unique identifier for each verset; it incorporates the group number and assigns a verset number—for example 1.11 indicates the eleventh verset from the first mass cycle. My listing also reproduces the titles exactly as they appear in the original manuscript and expands their Latin contractions using editorial brackets. A common title is also provided to show that some mass items with slightly different wording in the manuscript are essentially the same type of mass item. This is significant because the titles correspond to liturgical feasts. In several instances TJL

contains more than one mass item for the same feast. For example, there are five items titled *Kyrie paschale* (Group nos. 5, 6a, 6b, 6c, and 7), of which only three can be considered distinct settings.

After sorting through duplicates, I have determined that TJL contains 80 distinct Mass Ordinary versets comprising three complete mass cycles (group nos. 1–3) and fourteen independent mass items (group nos. 4–15) catalogued in table A.2 in appendix A. Half or more of the versets must be unique for the item to count as a separate unit, with cross-references provided in the footnotes. If more than half are duplicated, the mass item is listed as a subset with its counterpart.

2.3. Problems in Chant Identification

A discussion of chant melodies across regions quickly becomes cumbersome. Most scholars use the various 20th-century versions of *Liber Usualis* and *Graduale Romanum* (hereafter "LU" and "GR" with its respective publication year, e.g. LU 1961) to identify the chants.²⁰ This method fails to address three issues. First, with the exception of troped chants, most lack a universal name. For example, the label "*Sanctus* from Mass IV" is confusing because sixteenth-century liturgical books do not use the same groupings and nomenclature

¹⁸ There are twelve group numbers assigned to these fourteen independent mass items in order to preserve the pairing in the manuscript; the scribes of TJL include the *Agnus Dei* as a companion to the *Sanctus*. However, the *Agnus Dei* as a separate mass item, even if it is only one verset, as is the case in TJL. There are two independent *Sanctus* items in TJL and each has a corresponding *Agnus Dei*, thus bringing the total to fourteen. One *Agnus Dei* verset is in a separate location from its corresponding *Sanctus* versets. See p. 113 in sec. 4.5.1 in ch. 4 for an explanation.

¹⁹ For example, 6b, a pair of versets on fols. 190v–191r, is a transposition of the first two versets in 6a. Mass item 6c on fols. 238r–240v is especially confusing because half of its versets match mass item 6a and half match item 7. Based on the duplication patterns seen in the *Credo* items (fig. 2.1), I decided that item 7 was a unique item and that 6c was assembled from two different mass items.

²⁰ I used LU 1956, 1961, and GR 1974, and my comparisons showed that all the chants under examination in this study are the same in all three. Pre-twentieth century editions of *Graduale Romanum* are referred to by name and year of publication.

that are found in LU and GR. Indeed Apel and others often must clarify that chant groupings found in complete organ mass cycles do not correspond to the groupings found in LU or GR.²¹ This clarification can give the false impression that the sixteenth-century composer's chant grouping is a deviation from an accepted norm, when, in fact, the composer may be setting one of the most common mass cycles in their region.

The second problem is accurate identifications, which, in turn, impact musical analysis. Identification based on twentieth-century versions of the chant encourages researchers to attribute variances between the chants and the versets' cantus firmi to artistic freedom and ignores the possibilities of regional variants or misidentification. In the case of TJL, the use of LU and GR has led to some misidentifications (see footnotes for table 2.1 below). Although she did consult sixteenth-century liturgical books, Brzezińska primarily relied on LU for chant identification.²²

The third problem in the identification of cantus firmi is that many chants in organ masses are not found in twentieth-century sources of plainchant. John Bryden and David Hughes have compiled an index of chant catalogs that is useful in this regard.²³ However,

²¹ Apel, *The History*, 102 & 105. He makes this clarification regarding the mass cycle in Attaingnant 1531 that begins with *Kyrie fons bonitatis*. In another case regarding the first mass cycle in TJL, [*Missa*] *per octavas*, Apel observes that Mass IV in LU corresponds to the cantus firmi in the *Kyrie* and *Gloria*, but not in the *Sanctus* and *Agnus Dei*. However, corresponding chants for all four components are found in sixteenth-century Polish graduals with the label *octavas*.

²² Barbara Brzezińska cites LU and John R Bryden's and David G. Hughes' *An Index of Gregorian Chant* (Cambridge, MA: Harvard University Press, 1969) as her primary means of identification in *Repertuar polskich tabulatur* (82). Although previous scholars such as White have done partial identifications of chants, Brzezińska's is the most recent and complete. Her chant identifications in the appendix on pp. 174–181 show that she consulted sixteenth-century Polish liturgical books primarily for chants for the Propers and Office of the Hours but identified the cantus firmi from the Mass Ordinary versets using LU and Bryden and Hughes.

²³ Bryden and Hughes, *An Index of Gregorian Chant* (see n21). There are separate catalogs of chants for each category of liturgical music such as sequences from the Mass Proper or hymns from the Office. The authors of the five main catalogs for the Mass Ordinary, cited in full in the bibliography, are: 1) Margaretha Landwehr-Melnicki for *Kyrie* chants, 2) Detlev Bosse for *Gloria* chants, 3) Peter Thannabaur for *Sanctus* chants, 4) Martin Schildbach for *Agnus Dei* chants, and 5) Tadeusz Miazga for *Credo* chants. The first four catalogs did

this index and the original catalogs it references rely on incipits, and scholars do not always indicate whether they cross-checked the complete chant against a regional liturgical book that is contemporaneous to the organ mass in question. Additionally, indexes and catalogs often do not preserve chant groupings and their rubrics within the original liturgical books.²⁴

These problems of nomenclature and accuracy are best resolved by the use of melody ID codes found in the *Cantus Index* database (CI),²⁵ an online catalog for mass and office chants that is the product of a multinational collaboration of universities and humanities foundations.²⁶ In discussing the chants of TJL, I refer to the melody ID, including the commonly known trope name in prose when possible. The gray cells in table 2.1 indicate new identifications and corrections. I compared each cantus firmus from TJL's versets with a complete version of its corresponding chant using several sixteenth-century Polish graduals (listed in the bibliography).

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not index Central European liturgical sources; these are indexed using the same numbers as catalogs 1–4 in Gábor Kiss, Zsuzsa Czagány, and Robert Klugseder, *Ordinariums-Gesänge in Mitteleuropa: Repertoire-Übersicht und Melodienkatalog*, Monumenta monodica medii aevi, vol. 6 (Kassel: Bärenreiter, 2009). For example, "*Kyrie* 18" corresponds the chant no. 18 in Landwehr-Melnicki's catalog. *Ordinariums-Gesänge* postdates and is not indexed in Bryden and Hughes.

²⁴ Kiss et. al, *Ordinariums-Gesänge* is the exception, providing extended excerpts in the chant catalog. For example, *Gloria* chants are given through the text *glorificamus te* and *Sanctus* texts through the text *Deus Sabaoth*. A separate chapter provides a table of contents with rubrics of the *Kyriale* (Mass Ordinary chants section) from selected liturgical sources used in the catalog.

²⁵ The melody ID is distinct from the Cantus ID, which is linked to the text. In the case of Mass Ordinary chants, multiple melodies are linked to the same text; they have different melody IDs but the same Cantus ID. CI cross references to the original chant catalogs (see n22) by adapting the catalog author's name and chant number into the melody ID. For example, MEL018, with MEL taken from the name Landwehr-Melnicki, is no. 18 in the *Kyrie* chant catalog. Likewise, BOS (from Bosse) is used for *Gloria* chants, THA (from Thannabaur) for the *Sanctus*, and SCB (from Schildbach) for the *Agnus Dei. Credo* chants are not in the CI database, so I use a similar style code with the abbreviation MZG, an adaptation of the author's name Miazga. His catalog divides into A and B groups, thus MZG33B is chant no. 33 in the B group.

²⁶ The database is hosted at the University of Waterloo, Canada and integrates multiple independent databases from universities in Canada, Czech Republic, France, Germany, Hungary, Poland, Portugal, Slovakia, and Spain. For more information, see http://www.cantusindex.org/home.

Table 2.1. Chant Identification in Organ Mass Items.

No.*	Mass Item and Common Title*	Folio in TJL	Melody ID (gray denotes new or updated ID)	Brzezińska's ID (Liber Usualis)
1	Kyrie from per octavas	021v	MEL018	LU 25, Mass IV
2	Kyrie from de Domina	064v	MEL111 ²⁷	LU 48 ²⁷
3	Kyrie from Officium Sollemne	137v	MEL048 ²⁸	LU 19, Mass II ²⁹
4	Kyrie per octavas	087v	MEL018	LU 25, Mass IV
5	Kyrie paschale	081r	MEL039	LU 31 & 16 ³⁰
6a	Kyrie paschale	155v	MEL039	LU 16
6b	Kyrie paschale	190v	MEL039	LU 16
6c	Kyrie paschale	238r	MEL039	LU 16
7	Kyrie paschale	207r	MEL040	LU 16
8	Kyrie virginitatis	039v	MEL048	LU 19, Mass II ²⁹
9	Kyrie Magne Deus	187v	MEL078	LU 28
10a	Kyrie de S.M. adventus	109r	MEL132	LU 84
10b	Kyrie de S.M. adventus	189v	MEL132	LU 84
11	Kyrie de Sancta Maria	186v	MEL171	LU 40
1	Gloria from per octavas	023v	BOS056	LU 26–7, Mass IV
2	Gloria from de Domina	066v	BOS037	no ID given
3	Gloria from Officium Solleme	140r	BOS024 ³¹	LU 86
12	Gloria de Sancta Maria Sabbatinis Diebus	224v	BOS023	LU 40
2	[Credo] from de Domina	069r	MZG531B	Miazga 531
3	[Credo] from Officium Sollemne	143r	MZG33B	Miazga 33

²⁷ LU 48 is incorrect (see n. 42). MEL111 is not found in *Liber Usualis* (1961) or *Graduale Romanum* (1974) but an incipit of the entire first *Kyrie* and *Christe* phrases is indexed in Kiss et. al, *Ordinariums-Gesänge*, 174–75. This chant is found in multiple Polish, Hungarian, and Bohemian liturgical books from the fifteenth and sixteenth centuries.

²⁸ MEL048 is paired with *Gloria* BOS024 (LU 86) in TJL; a different pairing is in Mass II, LU 19.

²⁹ Brzezińska notes that the *Christe* phrase could not be identified. However, the full chant in 16th-century sources, a different version than in LU, is a match for the cantus firmus, including the *Christe* verset.

Tablatures") matched the cantus firmi from the first and second versets (*Kyrie* and *Kyrie Tercium*) of the *Kyrie paschale* on fol. 81v to *Kyrie Rex genitor* (MEL047, LU31) and those from the third and fourth versets (*Christe* and *Ultimum Kyrie*) to *Kyrie lux et origo* (MEL039, LU 16). However, MEL047 has a distinctive ascending triad not found in the cantus firmi of the first and second versets. Furthermore, Tadeusz Maciejewski lists three versions of MEL039, the first of which matches the cantus firmi in all four versets of this *Kyrie paschale* in *Kyriale w Polsce do XVII wieku: katalog śpiewów mszalnych*, (Warszawa: Pax, 1976), 63. All versions correspond to MEL039, but the third pitch in the first version, an uncommon variant, is the source of the mistaken identity (MEL047). The difference offers a clue to the origin of this mass item: the uncommon variant comes solely from monastic sources, particularly the Benedictines, whereas the Diocesan, Collegiate, and Cistercian sources contain the universal version that matches the incipit for MEL039 in Landwehr-Melnicki's catalog.

³¹ See n29.

No.*	Mass Item and Common Title*	Folio in TJL	Melody ID (gray denotes new or updated ID)	Brzezińska's ID (Liber Usualis)
13a	[Credo] Patrem Solemne	038v	MZG33B	Credo IV, LU 71 ³²
13b	[Credo] Patrem Solemne	202r	MZG33B	Credo IV, LU 71 ³²
1	Sanctus from per octavas	025v	THA019	THA019
2	Sanctus from de Domina	071v	THA039/194 ³³	THA194
3	Sanctus from Officium Sollemne	143v	THA185	THA185
14	Angelicum Sanctus	241r	THA150	THA150
15	Sanctus Solemne	154v	THA185	THA185
1	Agnus Dei from per octavas	027r	SCB037	no ID given
2	Agnus Dei from de Domina	072v	SCB056 ³⁴	THA194
3	Agnus Dei from Officium Sollemne	145v	SCB226	no ID given
14	Agnus Dei from Angelicum Sanctus	242r	SCB179	with THA15035
15	Untitled [Agnus Dei]	248v	SCB226	Not found in LU ³⁶

Source: Some data adapted from Brzezińska, Repertuar polskich tabulatur, 174-77.

Note: All Melody ID codes are equal to their identification in *Liber Usualis*, indicated with LU and the page number, unless otherwise noted.

To establish the frequency of use and geographical region for each chant, I cross-referenced them in seven catalogs and the following three non-Polish sixteenth-century graduals:³⁷

^{*} Number in the leftmost column corresponds to the mass item number found in table A.2 Catalog of Organ Mass Versets in TJL in appendix A. Common Titles also correspond to table A.2.

³² Only first 8 notes of the cantus firmus correspond to LU 71. Brzezińska notes that the chant does not match the cantus firmus in the *Qui Propter nos* verset but does not observe the discrepancies in the *Patrem* verset.

³³ Kiss et al. note that these are the same except THA194 is a transposition to D; Thannabaur lists only one source for THA194, the *Sammelband des Frater Joachim Cuontz aus St. Gallen* (CH-SGs-546), in *Das einstimmige* Sanctus *der römischen Messe in der handschriftlichen Überlieferung des 11. Bis 16. Jahrhunderts*, Erlanger Arbeiten zur Musikwissenschaft, Band I, (Munich: W. Ricke, 1962), 192. THA039 (in A) matches the version in PL-Kk 44.

³⁴ SCB056 is same melody as THA039/194, but uses the *Agnus Dei* text. See n. 35 below.

³⁵ Brzezińska refers the reader to *Sanctus* I on 241r due to duplicated measures in the *Agnus Dei* but does not specifically identify this as THA150. This is another example (see also THA039 and BOS056) of *Sanctus* and *Agnus Dei* chants using the same melody, a common occurrence. Martin Schildbach discusses the similarities between *Agnus Dei* melodies and other chants (e.g. *Kyrie, Sanctus*) in ch. 4, sec. 9 in "Das einstimmige *Agnus Dei* und seine handschriftliche Überlieferung vom 10. bis zum 16. Jahrhundert" (PhD diss., Friedrich Alexander Universität, 1967), 51–60. Kiss et al. provide a list that cross references melodies shared by the *Sanctus* and *Agnus Dei* in *Ordinariums-Gesänge* (19).

³⁶ This verset's transposed counterpart found on 145v was also classified as unidentifiable.

³⁷ The seven catalogs are: 1) Landwehr-Melnicki for *Kyrie* chants, 2) Bosse for *Gloria* chants, 3) Thannabaur for *Sanctus* chants, 4) Schildbach, for *Agnus Dei*, 5) Miazga for *Credo* chants 6) Kiss et. al, *Ordinariums-Gesänge* for sources not indexed in the first four catalogs (see n22), and 7) Tadeusz Maciejewski, *Kyriale w Polsce* for locating chants in Polish graduals (see n31).

Graduale Pataviense (Vienna, 1511) and two versions of Graduale Romanum (Venice, 1499 and Venice, 1560).³⁸ Although most of the cantus firmi in TJL have been previously identified by other scholars, my comprehensive comparison yielded several corrections and identified several missing items, conveniently labeled with melody ID codes. All of the chants from the organ masses in TJL are found in Polish liturgical sources, indicating that they were readily available to the scribes of TJL.

2.4. Chant Repertoire

Tabulation of the chant melodies used in the organ masses of TJL, as seen in table 2.2, shows that the oldest, most frequently used chants in Europe were also equally important in Poland. *Kyrie cunctipotens genitor Deus* (MEL018), still in use as Mass IV today, is the most commonly set chant in the extant sources, regardless of region. All the Italian sources have one mass using this *Kyrie*; the Attaingnant source and Buchner each provide one. According to Margaretha Landwehr-Melnicki, the chant has been in use since the tenth century and is the most frequently found *Kyrie* in French, English, German, Austrian, Italian and Spanish liturgical manuscripts.³⁹ Similarly, it is one of the most frequently used chants in Polish, Bohemian, and Hungarian liturgical sources.⁴⁰ Other commonly found *Kyrie* chants

³⁸ Graduale Romanum, Ed. Franciscus de Brugis (Venice: 1499), http://polona.pl/item/47034864. This full version contains many more Mass Ordinary chants than those used as cantus firmi in Italian organ masses, including Kyrie fons bonitatis (see sec. 2.7). The later version, Graduale [secundu]m morem Sancte Romane ecclesie abbreviatum (Venice, 1560), DOI: http://classic.cincinnatilibrary.org/record=b2738251~S1, is abbreviated and contains chants for four full masses and an additional Kyrie and Agnus Dei.

³⁹ Margaretha Landwehr-Melnicki, *Das Einstimmige Kyrie Des Lateinischen Mittelalters*, (Forschungsbeiträge zur Musikwissenschaft, vol. 1. Regensburg: Bosse, 1968), 20, 13-14. MEL018 is included in 83 of 97 French sources, 3 of 3 English, 100 of 139 German, 40 of 45 Austrian, 83 of 139 Italian, and 2 of 2 Spanish.

⁴⁰ Exact percentages are not given in Kiss, et al., *Ordinariums-Gesänge* and Maciejewski, *Kyriale w Polsce*, but I calculated it from the pages listing individual melodies and all sources surveyed. Kiss et al. found MEL018 in 46% of their surveyed Bohemian sources and 78% of Hungarian (166, 253–261). Maciejewski found it in 63% of Polish sources (63, 150–160). These percentages are likely lower than the actual frequency of use due to lacuna that affect a tally of Mass Ordinary chants. For example, the *Kyrie–Gloria* section in PL-Kj 1267, is missing; the Mass Ordinary chants start with the *Sanctus* section, which does contain all chants used in TJL.

used in TJL are *Kyrie fons bonitatis* (MEL048) and *Kyrie cum jubilo* (MEL171). The latter may have some regional variation because Polish graduals contain a slightly different version from the chant found in *Graduale Romanum* (Venice 1560), which matches the version in LU 1956 and LU 1961.⁴¹ Likewise, three of the four *Gloria* chants are found across Europe.

A significant number of cantus firmi in TJL represent a distinct Central European chant repertoire, indicated by the medium-grey cells in table 2.2. The second mass cycle *de Domina* is based solely on regional chants from Central Europe; none of the other extant organ masses use these chants as cantus firmi. *De Domina*'s corresponding chant for the *Kyrie* (MEL111) is found primarily in German, Austrian, Bohemian, Hungarian, and Polish liturgical books, as seen in table 2.2. The *Gloria* for this mass, a setting of BOS037, is paired with *Kyrie* MEL111 in Polish and other Central European chant sources. The cantus firmus for the *Credo* in *de Domina* matches MZG531B. These three chants are also found in *Graduale Pataviense* but not in *Graduale Romanum* (Venice, 1499 and Venice 1560). Notably the three volumes of the Olbracht gradual (1501–06), which generally correspond very closely to all the cantus firmi in TJL, lack the *Credo* chant; MZG531B is found in an older Cracovian source PL-Kj 1267 V. *De Domina's* corresponding *Sanctus* THA039 and *Agnus Dei* SCB056 are the least frequently found chants among all of those used in TJL (see table 2.2).

⁴¹ Brzezińska states that the cantus firmus of the *Christe* versets fol. 138v and on fol. 40r do not match the version in LU 19 in *Repertuar polskich tabulatur* (175). However, the cantus firmi in TJL perfectly match the versions found in Polish graduals. The *Christe* phrase in the Polish version is lightly ornamented with neighbor tones. Primary sources and tracing the cantus firmus in the verset eliminates the confusion.

⁴² This pair is another instance of misidentification by Brzezińska, who identified the first verset of the *Kyrie* as LU 48 and marked the *Christe* verset and the *Gloria* as not found in LU (*Repertuar polskich tabulatur*, 176). The first phrases of the *Kyrie* do indeed have a passing similarity, but the *Kyrie* chant is a better match for MEL111 (*Kyrie clementissime*) and the *Gloria* for BOS037. This corrected identification is supported by the principle that the best match would have concordances in sixteenth-century Polish liturgical books.

Table 2.2. Chant Repertoire: Regions of Use and Rubrics. Shaded cells indicate regional chants; the darker the shading, the more localized the chant.

Genre	Melody ID	Regions of Most Frequent Use	In <i>Graduale</i> Pataviense 1511	In <i>Graduale</i> Romanum 1499	Frequency of Use in Poland*	No. of Times Used in TJL	Group No. in TJL	Most Common Rubric (Central European sources)
	MEL018	Europe	Y	Y	high	2	1, 4	per octavas
	MEL039	Central Europe, Germany, & Italy	Y	N	high	5	5, 6a, 6b, 6c, 7	paschale
	MEL040	Rare (a single German source)	N	N	n/a	1	7	
2.	MEL048	Europe	Y	Y	high	2	3, 8	solenne, solemne
Kyrie	MEL078	Central Europe and Germany	Y	N	high	1	9	Item aliud [solemne]
	MEL111	Central Europe and Germany	Y	N	medium	1	2	de BVM, de virginibus
	MEL132	Central Europe	Y	N	medium	2	10a, 10b	de Beata Virgine in Adventu
	MEL171	Europe	Y	Y	high	1	11	de Domina, de Beata Virgine solenne
	BOS023	Europe	Y	Y	high	1	12	paired with MEL171
ria	BOS024	Central Europe, Germany, & Italy	Y	Y	high	1	3	paired with MEL048 and 078
Gloria	BOS037	Central Europe	Y	N	low	1	2	paired with MEL111
	BOS056	Europe, except Spain	Y	Y	high	1	1	de Apostolis & often paired with MEL018
Credo	MZG531B	Poland, Bohemia, and Germany	Y	N	high	1	2	in festis duplicibus et per octavas, de BVM, de Apostolis,
<u></u>	MZG33B	Poland and Germany	N	N	high	3	3, 13a, 13b	Summis festis, solenne

Genre	Melody ID	Regions of Most Frequent Use	In <i>Graduale</i> Pataviense 1511	In <i>Graduale</i> Romanum 1499	Frequency of Use in Poland*	No. of Times Used in TJL	Group No. in TJL	Most Common Rubric (Central European sources)
	THA019	Central Europe	Y	N	medium	1	1	Solenne de Beata Virgine, per octavas
tus	THA039	Central Europe	N	N	low	1	2	de BMV, added per octavas
Sanctus	THA150	Central Europe and Germany	Y	N	medium	1	14	Angelicum
	THA185	Central Europe ⁴³	N	N	medium	2	3, 15	solenne, solemne (often elaborate miniature instead)
	SCB037	Central Europe and Germany	Y	N	low	1	1	paired with THA019
Agnus Dei	SCB056	Hungary and Poland	N	N	low	1	2	paired with THA039
Agnu	SCB179	Central Europe and Germany	Y	N	medium	1	14	paired with THA150
	SCB226	Europe	N	N	medium	1	3	paired with THA185

Sources: Data adapted from Bosse, Untersuchung einstimmiger mittelalterlicher Melodien; Kiss, et al., Ordinariums-Gesänge; Landwehr-Melnicki, Das einstimmige Kyrie; Maciejewski, Kyriale w Polsce; Miazga, Die Melodien; Schildbach, "Das einstimmige Agnus Dei," and Thannabaur, Das einstimmige Sanctus.

Note: Regions are defined by countries according to current geopolitical borders. Central Europe encompasses Czech Republic & Slovakia (grouped as Bohemia in the table), Poland, Hungary, and Austria. The older catalogs by Landwehr-Melnicki, Bosse, Thannabaur, and Schildbach group Bohemian sources with Austrian ones which results in some sources, for example those from Prague, being counted again by Kiss et al. in Ordinariums-Gesänge. However, this does not affect the regions of use for the chants in this table because only MZG531B is affected and Miazga did differentiate between Bohemian and Austrian sources. German sources are considered separate from Central Europe because sometimes their chant repertoire is different. Thus, Germany is listed separately when it shares the same chant with Central European sources. When a chant is not found German sources, it is also not found in French or Italian ones. Swiss sources are listed separately in some catalogs and grouped with Germany in others; this table combines Swiss and German sources.

* High indicates that the chant was found in 60% or more of the catalogued Polish sources, medium in 30–59%, and low in fewer than 30%.

⁴³ THA185 is found in 3 of 124 German sources and is not found at all in French, Italian, English, and Spanish sources. Interestingly, a similar melody, THA203, infrequently found in Central European sources, is included in German, English, French, Italian, and Spanish sources as well as in GP 1511 and GR 1499. See Thannabaur, *Das einstimmige* Sanctus, 16–17.

The chants in *de Domina* (group 2 in table A.2 in appendix A) are rarely found outside of Central European sources and were likely unknown in Western Europe. Although some chants are found in a small number of German sources, the extant masses by Buchner do not use them, nor are they found in any other extant organ masses. Thus *de Domina* represents a regional repertoire and is a significant addition to organ literature.

Although *Credo* chants commonly found in European liturgical books are included in multiple Polish graduals, the TJL scribes instead chose two regional chants: the aforementioned MZG531B in *de Domina* and MZG33B in three *Credo* items (Nos. 3, 13a, and 13b in table A.2 in appendix A). ⁴⁴ Both chants are found in the gradual of the Canons Regular of Czerwińsk (PL-CZERs 12), and the *Graduale de tempore et de sanctis* (PL-Kj 1267 V). Tadeusz Miazga's catalog shows that their highest frequency of use is in German and Polish sources. ⁴⁵ Lenka Hlávková also found both of these *Credo* chants in Utraquist graduals. ⁴⁶ This concordance attests to their popularity in both Catholic and Protestant circles.

Both of these chants are special because they are notated rhythmically in multiple graduals and have a repeating melodic structure. The practice of notating a *Credo*

⁴⁴ Regarding MZG33B Brzezińska correctly identified the *Credo* from the third mass cycle (no. 3) but matched the Patrem verset from no. 13a and 13b to *Credo* IV (LU 71). However, she noted that the *Qui Propter Nos* verset is not found in LU (*Repertuar polskich tabulatur*, 177). In my observation organ mass versets from TJL always contain complete or nearly complete quotations of the chant according to a version found in a 16th-century Polish gradual. A comparison between the *Graduale de tempore et de sanctis* (ms. 1267, BJ) and LU shows that the *Credo* IV chant is distinctly different. Furthermore, *Credo* IV is found in *Graduale Romanum* 1499 and 1560 but not in *Graduale Pataviense*.

⁴⁵ Miazga, Tadeusz, *Die Melodien des einstimmigen* Credo *der römisch-katholischen lateinischen Kirche: eine* Untersuchung der Melodien in den handschriftlichen Überlieferungen mit besonderer Berücksichtigung der polnischen Handschriften, (Graz: Akademische Druck u. Verlagsanstalt, 1976), 46–7 & 110–11. Regional chants MZG531B and MZG33B are not found in liturgical books from Hungary or Western Europe. Representation in Bohemian sources is scarce; MZG33B is found in only one of these and MZG531B in seven.

⁴⁶ Lenka Hlávková, "Credo Settings in cantus fractus in Bohemian Sources: A Preliminary Report on a Neglected Ars Nova Repertory." Ars Musica and Its Contexts in Medieval and Early Modern Culture, ed. Paweł Gancarczyk (Warszawa: Liber Pro Arte, 2016), 247–253. Utraquists were followers of Jan Hus but maintained friendly relations with the Roman Catholic Church.

rhythmically is not unique to these chants. However, these particular two have several melismatic figures—a practice not typically seen in rhythmically set chants. Miazga states that MZG531B has a repetition-evolution structure.⁴⁷ The first phrase has a distinctive motive of a descending fourth followed by two rising fourths (F3–C3–F3–B-flat3); see figure B.1 in appendix B. The pitches from the complete first phrase, from *Patrem* to *et invisibilium*, are repeated three more times at phrases beginning with the texts *Qui propter nos, et resurrexit tertia*, and *et unam sanctam*. MZG33B, as described by Miazga, has a repetition structure and opens with a motive based on a fourth: (D4-A3-D4-C4-C4).⁴⁸ The repetition within the chant occurs on a sub-phrase level; see figure B.2 in appendix B. In a study on *cantus fractus* (rhythmic chant settings) in *Credos* from Utraquist graduals, Hlávková used these two *Credo* melodies to illustrate the similarities to secular repertoire in *formes fixes* and Latin *cantiones* models.⁴⁹ She posits that the structure and melodic repetition "transforms the *Credo* into a 'popular' piece, which can be memorized much more easily." Certainly, this memorability factor also enhanced the organ's ability to substitute for the text because the cantus firmus was more easily recognizable than chants without a similarity to 'popular' pieces.

Regional differences are seen in the overall choice of *Sanctus* and *Agnus Dei* melodies. In addition to the aforementioned *Sanctus* and *Agnus Dei* chants found in *de Domina*, the six other chants used in TJL, listed in table 2.2 above, are typically found as pairs in Central European liturgical books. None of the four pairs of chants correspond to those found in *Graduale Romanum* (Venice, 1499); *Graduale Pataviense* (Vienna 1511) contains two pairs. The

⁴⁷ Miazga, Die Melodien, 262.

⁴⁸ Miazga, Die Melodien, 262.

⁴⁹ Hlávková, "Credo Settings," 247–253.

regionality of all four pairs of chants has likely hampered past attempts to identify them. Brzezińska assigns the ID code THA019 to the *Sanctus* from the first mass cycle, ⁵⁰ with which I agree, but does not identify the *Agnus Dei* which matches SCB037. This *Sanctus* and *Agnus Dei*, despite their different ID codes, ⁵¹ are identical melodically and are paired together in both Polish graduals and *Graduale Pataviense* (fol. 191r). Another unidentified cantus firmus, used in the *Agnus Dei* from the third mass cycle (fol. 145v), ⁵² is actually SCB226, which again is found in the Olbracht and other Polish graduals. ⁵³ This chant also matches LU 21 and GR 10, and, like *Kyrie cum jubilo* (MEL171) is slightly more ornamented in the sixteenth-century Polish graduals (see n. 41 above). Its corresponding *Sanctus* is THA185. This *Sanctus—Agnus Dei*, almost always a matched pair in original sources, has a place of prominence in multiple Polish graduals, especially all three volumes of the Olbracht gradual. THA185 and SCB226 are typically the first pair in the *Sanctus—Agnus Dei* section, ⁵⁴ and the *Sanctus* begins with a miniature for the first initial. In the case of PL-Kk-44, the miniature portrays the Trinity with a choir of angels kneeling beneath them and singing a *Sanctus* from a large gradual held by two of the angels. For comparison the first chants in the *Kyrie-Gloria*

⁵⁰ Brzezińska, Repertuar polskich tabulatur, 175. Her use of Thannabaur's ID code signifies that she could not find it in *Liber Usualis*.

⁵¹ The ID codes correspond to their catalogs. See n35 above.

⁵² Brzezińska, Repertuar polskich tabulatur, 175.

⁵³ A transposed version of this verset is found again on fol. 248v and is an example of the importance of cross referencing both White's and Wilkowska-Chomińska's catalogs. White transcribes this verset but includes it among untitled works ("The Tablature of Johannes of Lublin," 160), while Wilkowska-Chomińska correctly identified and cross-referenced it in her catalog (*Tabulatura Organowa*, 45).

⁵⁴ Firsthand observation and the catalogs of selected Central European liturgical books—the catalogs index cantionals, graduals, missals, and others—show that chants are grouped into two sections: *Kyrie* and *Gloria* in one, and *Sanctus* and *Agnus Dei* in the other, with individual chants paired together according to the liturgical calendar. See also Kiss et. al, *Ordinariums-Gesänge*, 113–160. *Graduale Pataviense* follows the same layout. In contrast, both editions of *Graduale Romanum* group chants into complete mass cycles so that all four mass components are together. In *Graduale Romanum* 1560 the corresponding *Credo* is found between the *Gloria* and *Sanctus* but all other sources surveyed place *Credo* chants in a separate section after the *Agnus Dei*.

section of Polish graduals are typically *Kyrie fons bonitatis* (MEL048),⁵⁵ one of the most frequently found chants in all European liturgical sources, and its paired *Gloria* (BOS024). Notably the third mass Officium Sollemne in TJL combines all four of these chants (*Kyrie fons bonitatis* MEL048, *Gloria* BOS204, *Sanctus* THA185 and *Agnus Dei* SCB226) into one mass cycle with *Credo* MZG33B.

This chant grouping in the third mass cycle in TJL is not found in *Graduale Romanum* 1499, which organizes chants into complete mass cycles. Like the Polish sources, *Graduale Romanum* 1499 contains *Kyrie fons bonitatis* MEL048 and *Gloria* BOS024 but groups them with a *Sanctus-Agnus Dei* pair, THA203 and SCB114, rarely found in Central European liturgical books. The same type of discrepancy is also found in the first mass cycle: *Kyrie cunctipotens genitor Deus* (MEL018) and *Gloria* BOS056 are paired with a regional *Sanctus* & *Agnus Dei*, whereas the grouping in *Graduale Romanum* 1499 and 1560 corresponds to the current Mass IV in LU and GR. The different pairings in mass cycles suggest that liturgical practices had more variation than previously thought. Past identifications that focused on concordances with LU and GR overlooked the variety in the accompanying *Sanctus* and *Angnus Dei*. Fr

In conclusion all the cantus firmi in the TJL versets correspond to a Central

European chant repertoire comprised primarily of regional chants with some universal ones

⁵⁵ In Marian graduals (ordinarily titled *Graduale de Beata Maria*), the chant is MEL048 but the accompanying text is the trope *Kyrie virginatis amator*.

⁵⁶ Kiss et al. found THA203 in only fifteen out of 110 Central European sources, of which four are Polish. SCB114 is found in twenty, including the same four Polish sources, none of which are Cracovian (*Ordinariums-Gesänge*, 223–234). In contrast, THA203 is regularly found in German, Italian, and English sources (see n. 43 above). The two melodies are similar, but distinct, and the geographical divide is surprising.

⁵⁷ The concordances between twentieth-century sources (LU and GR) and *Graduale Romanum* 1499 and 1560 are much stronger, but even so there is a discrepancy in the chant grouping in one mass cycle. Mass IX (*Kyrie cum jubilo*) uses THA033 and SCB114 but *Graduale Romanum* 1499 and 1560 use THA032 and SCB034, both of which are distinctly different melodies. See table 2.9 below.

represented—six of the twenty-two chants in table 2.2 are used throughout Europe. Regional chants are more likely to be used for the *Credo, Sanctus*, and *Agnus Dei*, as indicated by the medium and dark grey cells in the table. A significant number of *Kyrie* versets also use regional chants, but *Kyrie* items also outnumber other mass items. Most of the chants in table 2.2 are found with medium to high frequency in Polish liturgical sources but the second mass cycle uses three chants that are infrequently found. Examination of this mass cycle yielded many new findings which will be discussed further in section 2.6 and in ch. 3. In the course of tracing the chants through the versets for purposes of identification, I observed that cantus firmi consistently match the chants as they are written in sixteenth-century Polish graduals. Further examination of the cantus firmi from these versets provides additional evidence for a consistent liturgical practice in Poland.

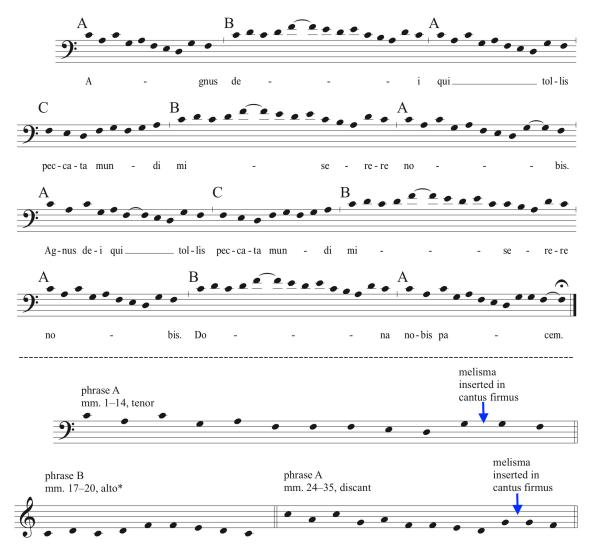
2.5. The Cantus Firmi in Individual Organ Versets

The cantus firmi in TJL generally correspond to all the pitches of the chant in the versions found in Polish graduals. Deviations are minor and occur in three ways: First, the cantus firmus omits ornamental pitches from the chant. Examination of chants in several graduals shows that their melodies varied slightly, for example the addition of a lower neighbor tone; these elaborations are sometimes absent from their corresponding cantus firmi. Second, the cantus firmus adds ornamental pitches—at ends of phrases of the chant or before the final chant pitch at the end of a verset. Third, the cantus firmus paraphrases the chant. This occurs only in the *Agnus Dei* versets. For example, the structure of SCB037 from the first mass cycle is based on two frequently repeating melodic phrases connected with by phrase C for the text *peccata mundi* (see figure 2.2a). The texts *agnus, qui tollis*, and

nobis/nobis pacem are sung to phrase A; the texts dei, miserere, and dona are sung to phrase B.

The cantus firmus for the corresponding verset, shown in figure 2.2b, uses both phrases A & B but does not provide a full statement of the corresponding melodic phrase from the chant.

Figure 2.2. Melodic Repetition and Paraphrase in *Agnus Dei* Chant SCB037. *Top* (2.2a), Chant with phrases identified; *bottom* (2.2b), cantus firmus from the verset in [Missa] per octavas.



^{*}The bass precedes the alto with the first six notes of the chant in mm. 15–17 as fore-imitation; after the alto's entrance, the bass is transformed into an elaborated version of the cantus firmus through mm. 19.

In all other mass items the cantus firmus states the chant note-for-note from the beginning, and the occasional omission of chant pitches can be accounted for as variation seen in different graduals or as a transition into the final cadence.⁵⁸ Often the deviation at final cadences leads to the pitch for the choir's next entrance.

Tracing the cantus firmus in the versets from TJL accurately identifies the text phrases assigned to the organ because all versets set the chant in *cantus planus*, rarely deviating from the melody. After the organ's texts are identified, the choir's texts and resulting *alternatim* patterns can be deduced. Sometimes the patterns show an asymmetrical distribution of text; in these cases the organist may have recycled an existing verset if its cantus firmus matches the melody of a subsequent text phrase. When deciding where verset repetition is possible, I considered texts with melodies identical to the cantus firmus; when that was not possible, I looked for texts with similar melodies that would result in the most symmetrical alternation between choir and organ. It is also possible that the organist improvised additional versets of which no examples survive. A comparison survey of *alternatim* patterns in all early-sixteenth century organ masses shows a distinctive and consistent practice in Poland.

2.6. The Alternatim Patterns in European Organ Masses

Organ masses preserved in period sources follow a standard format in which versets for the organ's portion of the text are supplied, but the texts for the choir's portion are

⁵⁸ The variations are minor at best. The cantus firmi in TJL most closely correspond to Polish graduals from the Krakow region, particularly the three volumes of the Olbracht gradual (1501–1506) from the Krakow Cathedral. This further strengthens a link between TJL and Krakow; the current research suggests that Johannes of Lublin (Jan z Lublina) was active at St. Mary's in Krakow before TJL was compiled in Kraśnik (see ch. 4, n. 32).

omitted. Verset titles are taken from the first few words of the text phrase assigned to the organ. The Italian practice was the most codified with a scheme that typically provides organ versets for all odd-numbered phrases, resulting in a balanced phrase-by-phrase alternation. Organ masses from all other regions have varying degrees of similarity to the Italian practice. Sometimes a phrase may be subdivided between the choir and organ or, in the case of long texts such as the *Gloria* or *Credo*, multiple phrases of text are played by the organ or sung by the choir. An examination of the *alternatim* patterns by mass item shows a correlation between the length of the text and degree of similarity to the Italian practice: Patterns in mass items with the shortest texts, *Kyrie* and *Agnus Dei*, show the greatest degree; the medium-length *Sanctus* shows some, and those with the longest texts, *Gloria* and *Credo*, show the least. The differences geographically divide European liturgical practice into regional traditions.

Table A.3, found in appendix A, shows patterns in all extant sources between 1500 and 1550, plus patterns from the Faenza Codex (ca. 1420–30) and three additional sources after 1550 (see n. 4 above). This expanded table provides a complete comparison—previous tables omitted the organ masses in Polish sources (TJL and TKD)—and incorporates previously published information with new findings. The Italian sources have nearly identical *alternatim* patterns, thus this discussion uses abbreviated-form tables (2.3–2.7) that combine the Italian sources into one common pattern.

The *Kyrie* can be comprised of three, four or five organ versets, and all regions appear to follow the same standard *alternatim* pattern, with the exception of Cabezón, seen

⁵⁹ Existing data is adapted from Apel, *The History*; Holton Prouty, "The Italian Organ Mass," 48–56; *Early Tudor Organ Music II*, ed. Stevens.

below in table 2.3. Buchner and Attaingnant always provide five versets for the *Kyrie* in the order Ky Ky Ch Ky Ky (Ky = *Kyrie* and Ch = *Christe*).

Table 2.3. Kyrie Alternatim Patterns.

Phrase Number	Text	TJL	TKD	Buchner	All Italian	Attaingnant	Philip ap rhys	Cabezon
1	Kyrie eleison	Org	Org	Org	Org	Org	C, Org	Org
2	Kyrie eleison	С	С	С	С	С	С	С
3	Kyrie eleison	Org	Org	Org	Org	Org	Org	Org
4	Christe eleison	С	С	С	С	С	С	Org
5	Christe eleison	Org	Org	Org	Org	Org	Org	С
6	Christe eleison	С	С	С	С	С	С	Org, rpt
7	Kyrie eleison	Org	Org	Org	Org	Org	Org	Org
8	Kyrie eleison	С	С	С	С	С	С	С
9	Kyrie eleison	Org, rpt	Org, rpt	Org	Org, rpt	Org	Org	Org, rpt

KEY: Org = organ verset | C = choir | Org, rpt = repeat an organ verset

Sources: Some data adapted from Apel, The History 116 & 134; Holton Prouty, "The Italian Organ Mass," 48–56; Early Tudor Organ Music II, ed. Stevens.

When five versets are provided in this configuration, there is no doubt that the organ and choir alternated phrase by phrase for the text with the organ playing on all odd-numbered phrases as shown in table 2.3; my comparisons to the original chants confirmed this scheme. The five Italian sources are consistent in following this scheme as well.⁶⁰ The *Kyrie* from the

⁶⁰ Table A.3 in appendix A shows that the masses by Cavazzoni contain only three versets total for the *Kyrie*, but the score also includes the instructions *iterum repetitur* (repeat again) for the first and third versets, both setting the text *Kyrie eleison*, resulting in the same standard schema.

mass by Philip ap Rhys follows the standard pattern with a minor variation: The first phrase is divided between choir and organ, and the verset titles take the text of a trope, not the standard text listed in table 2.3.⁶¹ TJL only provides four versets in the order Ky Ky Ch Ky. No repetitions are specified, but the final verset titled *Ultimum* [last] *Kyrie*, can be played for phrases seven and nine, thus following the standard pattern.⁶² Although the *Kyrie* items by Cabezón typically provide four versets in the order Ky Ky Ch Ky, the melodic structures of the corresponding chants show that these four versets follow a different pattern as seen in the last column in table 2.3. In his discussion of the *Kyrie* items by Cabezón, Apel observes that the cantus firmi from the organ verset for the *Christe* matches the melodies for the first and third phrases of this text, not the second phrase which has a significantly different melody.⁶³ Since other contemporaneous sources have not survived, this pattern is assumed to be representative for Iberian liturgical practice.

All regions of Europe likely followed the standard pattern of Organ–Choir–Organ for the *Agnus Dei* seen in table 2.4. Both the Buchner and Attaingnant sources reflect this pattern with two different versets for each *Agnus Dei* item for the first and third text phrases. The mass by Philip ap Rhys also follows this pattern with the slight difference of a division in the first text phrase between choir and organ. A lone surviving *Agnus Dei* verset by John Redford (GB-Och 371) suggests that the first phrase was not always divided in the English

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⁶¹ Denis Stevens explains the *alternatim* pattern in the introduction and editorial commentary to *Early Tudor Organ Music II: Music for the Mass*, by Philip ap Rhys et al. (London: Stainer and Bell, 1969), ix-xv.

⁶² Polish graduals often contain the chants in a Ky Ch Ky Ky scheme with the last being a slightly more elaborate version its preceding phrase, but the organ versets provide Ky Ky Ch Ky. The first two Ky versets must have been intended before the Christe because they are always titled *Kyrie* and *Kyrie Tercium*, appear before the *Christe*, and correspond to the first phrase in the graduals. The last organ verset is typically titled *Ultimum Kyrie* and matches the shorter, penultimate chant phrase in the graduals.

⁶³ Apel, The History, 134.

tradition because the cantus firmus corresponds to the chant melody for the text *Agnus Dei* qui tollis peccata mundi miserere nobis.

Table 2.4. Agnus Dei Alternatim Patterns.

Phrase Number	Text	ПГ	Buchner	All Italian	Attaingnant	Philip ap rhys
1	Agnus Dei, qui tollis nobis,	V	Org	V	Org	C, Org
2	Agnus Dei, qui tollis nobis,	V	С	V	С	С
3	Agnus Dei, qui tollis pacem.	V	Org	V	Org	Org

KEY: $Org = organ verset \mid C = choir, \mid V = varies.$

Sources: Some data adapted from Apel, The History, 106; Holton Prouty, "The Italian Organ Mass," 48–56; Early Tudor Organ Music II, ed. Stevens.

Although Redford's mass item could be incomplete, Italian sources and TJL also provide only one verset for the *Agnus Dei*. The original plainchants corresponding to the cantus firmi in these mass items show a high degree of repetition in melodic phrases (typically aba¹ or aaa¹). The extension of the third phrase (a¹) is based upon a return of the opening motives. Most likely the single verset was played for the first phrase and repeated for the third, but, in some cases where the chant's melodic structure is aaa¹, other configurations, for example Choir–Choir–Organ, cannot be ruled out.

The patterns seen in the *Sanctus* versets show a regional unity in Northern Europe and suggest a different practice in Southern Europe. The four versets included in Buchner's *Fundamentum* leave no doubt that the basic scheme alternated on each phrase with the organ playing on all odd-numbered phrases (see table 2.5 below). The versets in TJL suggest the same pattern, but only one *Osanna* verset is provided. This was likely repeated for the

"O" at the end of the *Benedictus* phrase, indicating that the choir should repeat the *Osanna* phrase of the chant. It is reasonable to assume that the organ also repeats the verset when substituting for the choir. Although the second mass cycle does not contain an *Osanna* verset, the cantus firmus for the *Sanctus Tercium*, the third phrase of text, is identical to the chant for the fifth and seventh phrases (*Osanna in excelsis*). This shared pattern for the *Sanctus* suggests that the Polish liturgical tradition was quite similar to the German tradition.

Table 2.5. Sanctus Alternatim Patterns.

Phrase Number	Text	TJL	TKD	Buchner	All Italian	Attaingnant	Philip ap rhys
1	Sanctus	Org	Org	Org	Org	Org	С
2	Sanctus	С	С	С	С	С	Org
3	Sanctus, Dominus Deus Sabaoth.	Org	Org	Org	Org	Org	↓
4	Pleni sunt cæli	С	С	С	С	С	С
5	Osanna in excelsis.	Org	Org	Org	?	\downarrow	Org
6	Benedictus qui venit	С	С	С	?	Org	С
7	Osanna in excelsis.	Org, rpt	Org, rpt	Org	5	С	Org

KEY: $\mathbf{Org} = \text{organ verset} \mid \mathbf{C} = \text{choir} \mid \mathbf{V} = \text{varies} \mid \mathbf{Org}, \mathbf{rpt} = \text{repeat an organ verset} \mid \mathbf{\downarrow} = \text{previous party continues} \mid \mathbf{?} = \text{indeterminate due to missing versets or inability to trace cantus firmus}$

Sources: Some data adapted from Apel, The History 92; Holton Prouty, "The Italian Organ Mass," 48–56; Early Tudor Organ Music II, ed. Stevens.

The pattern in England can also be grouped with the Polish and German tradition, although there is a significant difference: The pattern in the *Sanctus* by Philip ap Rhys is identical for the fourth through seventh phrases, but, surprisingly, it is the only mass item to begin with

the choir for the first *Sancuts*. The cantus firmus from the first organ verset corresponds to the chant melody for the second and third phrases (*Sanctus, Sanctus, Dominus Deus Sabaoth*); the melody in the second phrase is distinct from that in the first so there is no doubt that the choir sang first.

In contrast the *Sanctus* in the Attaingnant source shows a markedly different pattern in phrases four through seven that omits *Osanna* versets and represents a Southern tradition. The *Sanctus* items contain a *Benedictus* verset whose cantus firmus matches all of phrase six; by process of elimination the choir sang phrases four and five (*Pleni sunt caeli* and *Osanna in excelsis*). The 1662 *Caeremoniale Parisienne*, a French source on liturgical practice, stipulates the same pattern as the Attaingnant source.⁶⁴ The *alternatim* for other mass items in the Attaignant source typically follow the instructions found in *Caeremoniale Parisienne*. Although this source is more than a hundred years later than Attaingnant's publication, it is the oldest extant French source containing instructions on dividing the text for *alternatim* practice.

Sixteenth century Italian organ masses do not provide a definitive realization of the *Sanctus*, but later sources suggest a pattern similar to that in the French tradition. As seen in table 2.5, sixteenth-century Italian masses do not contain any versets after the third phrase; the pattern for this portion cannot be determined on the basis of the extant masses.⁶⁵

However, Edward Schaefer presents evidence that the *Sanctus* was divided into two separate parts between phrases five and six; the elevation of the host occurred after phrase five. The choir was silent during the elevation while the organist played solemnly, most likely

⁶⁴ The prescriptions in *Caeremoniale Parisienne* are discussed in Bruce Gustafson, "France," 100-01. His chart shows that phrases six and seven were performed together, either by the choir or the organ. However, the cantus firmi in both *Benedictus* versets from the Attaingnant source correspond to phrase six only.

⁶⁵ The corresponding chants for these *Sanctus* versets do not contain melodic repetition for the subsequent phrases of text (*Osanna, Benedictus*, etc.), negating the option of repeating organ versets.

improvising as well.⁶⁶ Phrases six and seven could have been sung by the choir or taken by the organ. Two seventeenth-century Italian publications contain *Benedictus* versets, suggesting that the general *Sanctus* pattern was quite similar to the French practice.

The longer texts of the *Gloria* and *Credo* are likely a factor in the great variety of their *alternatim* schemes. Patterns again diverge geographically along a Northern-Southern divide. The plan in the Southern tradition, demonstrated in the French and Italian sources, is considered the standard by scholars of organ literature. This well-established scheme was in use before the sixteenth century because it is identical to the one found in the Faenza Codex (see table A.3 in appendix A). The priest chants the first phrase, then the organ plays on all even-numbered phrases. There is a slight difference between Italian sources and the Attaingnant source for phrases 18–19 of the *Gloria*, but the organ always takes the last phrase.

Although the pattern seen in the Polish and German traditions contains significant differences from phrase 14 onward, similarities suggest a Northern tradition. The opening of the *Gloria* is the most notable difference with the Southern tradition; the choir's first entrance is phrase six, "*Gratias agimus tibi* . . ." (table 2.6). Contrary to the results of earlier research, ⁶⁷ Buchner did not skip phrases of text in the opening of the *Gloria*. An analysis of two *Et in terra pax* versets (items 19a and 31a in *Sämtliche Orgelwerke: Fundamentum und*

⁶⁶ Edward E. Schaefer, "Bernardino Bottazi's *Choro et Organo* and the Italian Organ Mass of the 16th and 17th Centuries," *The Organ Yearbook* 18 (1987): 48–49. He also discusses irregularities in the *Sanctus alternatim* patterns and suggests several solutions based on ceremonials and organ manuals (64–70). The most plausible assigns phrases 3–5 to the organ for flexibility in accompanying the priest's actions. Then, the organ played a solo for the elevation followed by another organ piece or a choral motet for phrases 6–7. This article came to my attention just before publication of this dissertation, well after my analysis of Cavazzoni's masses.

⁶⁷ Apel, *The History*, 93. "Buchner's settings are striking in that he omits not only the four invocations but also the following long V7 [phrase 7], and later he changes from setting the even-numbered verses (8, 10) to working out the odd-numbered ones (13, 15, 17)."

Kompositionen der Handschrift Basel FI 8°) shows that the cantus firmi have their corresponding plainchant pitches for the text from "Et in terra pax" through "glorificamus te"—phrases 2–6.

Table 2.6. Gloria Alternatim Patterns.

Phrase Number	Text	TJL	TKD	Buchner	All Italian	Attaingnant	Philip ap rhys
1	Gloria in excelsis deo	Р	Р	Р	P	Р	Р
2	Et in terra pax	Org	Org	Org	Org	Org	C, Org
3	Laudamus te	\	\downarrow	\	С	С	С
4	Benedicimus te	\downarrow	\downarrow	↓	Org	Org	↓
5	Adoramus te	\downarrow	\downarrow	\downarrow	С	С	↓
6	Glorificamus te	\downarrow	\downarrow	\downarrow	Org	Org	↓
7	Gratias agimus	С	С	С	С	С	Org
8	Domine Deus Rex	\downarrow	\downarrow	Org	Org	Org	С
9	Domine Fili	\downarrow	\downarrow	С	С	С	Org
10	Domine Deus Agnus Dei	Org	Org	Org	Org	Org	С
11	Qui tollis nobis	\downarrow	\downarrow	\downarrow	С	С	Org
12	Qui tollis nostram	С		С	Org	Org	С
13	Qui sedes nobis	Org	V	Org	С	С	Org
14	Quoniam tu solus	С	5	С	Org	Org	С
15	Tu solus Dominus	\downarrow	5	Org	С	С	\downarrow
16	Tu solus Altissimus	↓	5	С	Org	Org	\downarrow
17	Cum Sancto Spiritu	\downarrow	Org	Org	С	С	Org
18	In gloria Dei Patris	↓	5	↓	V	Org	\downarrow
19	Amen	1	?	\	Org	\	\downarrow

KEY: $\mathbf{Org} = \text{organ verset} \mid \mathbf{C} = \text{choir} \mid \mathbf{P} = \text{priest or cantor} \mid \mathbf{V} = \text{varies} \mid \downarrow = \text{previous party continues}$? = indeterminate due to missing versets or inability to trace cantus firmus

Sources: Some data adapted from Apel, The History 93; Holton Prouty, "The Italian Organ Mass," 48–56; Early Tudor Organ Music II, ed. Stevens.

Although the subtitle for item 31a states that the discant has the cantus firmus, the chant cannot be easily followed in the coloristic discant. However, the tenor voice from mm. 5–37 corresponds to the chant for the text from *Benedicimus te* to *Glorificamus te* (figure 2.2).⁶⁸

Like the masses by Buchner, all of the *Gloria* items in Polish sources (both TJL and TKD) follow the same pattern for phrases 1–7, providing one organ verset for phrases 2–6.⁶⁹ The Polish sources skip an organ verset for phrase 8 (*Domine Deus Rex*) but share the same scheme with Buchner's masses for phrases 9–14, where TJL provides the organ versets *Domine Deus Agnus Dei* (for phrases 10–11), and *Qui sedes* (for phrase 13). These similar portions of the *Gloria* show a tendency to group phrases of text into larger organ versets.

For the remainder of the *Gloria*, there are significant differences between the lone German and two Polish sources—Buchner's masses alternate phrase by phrase, but TJL's masses do not provide versets for the organ after phrase 14. The lack of versets assigns six phrases of text at the end of the *Gloria* to the choir. An examination of all *Gloria* items in TJL and TKD shows that the chant melodies for phrases 14–19 do not match the cantus firmi from the three earlier organ versets, thus repetition of a verset is not an option. Perhaps the organist improvised, or the choir continued the *alternatim* with a choral motet (see n. 3).

⁶⁸ See *Hans Buchner, Sämliche Orgelwerke*, ed. Jost Harro Schmidt, Das Erbe Deutscher Musik, 54 (Frankfurt: H. Litolff's Verlag),130-31 and 200–201. Item 19a is from page 100 in Basel FI 8a and matches BOS056a (LU 26, Mass IV). 31a is from page 150 in Basel FI 8a and matches BOS012a. This chant does not have a match in LU but does appear on fol. 105r. in the *Augsburg Orgelbuch* (Munich, Universitätsbibliothek, Cod. Ms. 2° 153). This manuscript originates from the Carmelite church St. Anna in Augsburg and contains monophonic chants organized into mass cycles which the organist likely used for improvisation. See Douglas E. Bush, "The Liturgical Use of the Organ in German Regions Prior to the Protestant Reformation: Contracts, Consuetudinaries, and Musical Repertoires" (PhD diss., The University of Texas at Austin, 1982), 90–91, & 280, ProQuest (8217831). For a partial transcription of the chant that includes the text through *glorificamus te*, see Kiss et. al, *Ordinariums-Gesänge in Mitteleuropa*, 2009, 187.

⁶⁹ Brzezińska findings suggest that three of the *Et in terra pax* versets in TJL omit at least one phrase of text (*Repertuar polskich tabulatur*, 98–99). However, my observations found the chant pitches for phrases 2–6 in all four versets. For example, Brzezińska's chart on p. 98 shows that the pitches for the text *Benedicimus te* from the *Et In Terra Pax* [sic] on fol. 23v is missing, but the bass has these pitches in mm. 22–25.

Figure 2.3. Verset by Buchner Showing Migration of the Cantus Firmus. Letters correspond to the phrases marked in the chant facsimile. Score from *Hans Buchner: Sämtliche Orgelwerke*, ed. Jost Harro Schmidt, 200–201. Chant from *Augsberger Choralbuch*, public domain.



Unlike the pattern in TJL, TKD contains versets for *Cum Sancto Spiritu*, but whether these were part of an organ mass is unknown. Both settings of *Cum Sancto Spiritu* are two different intabulations of the same motet by Josquin and are separated from the other *Gloria* versets in another section of the manuscript. However, the masses by Buchner do provide an organ verset for this text. Despite these differences, the similarities sufficiently establish a loosely standard pattern for the Northern tradition: three organ versets (*Et in terra pax, Domine Deus Agnus Dei,* and *Qui sedes*) are provided, and *Et in terra pax* groups phrases 2–6 together. The scheme for the *Gloria* from Philip ap Rhys' Mass is very different from all other extant sources and lacks sufficient common ground with either Southern or Northern traditions.

The patterns in the *Gloria* also differ according to liturgical feast. Masses for feasts related to Mary the mother of Jesus (Marian feasts) generally use the trope *Gloria spiritus alme*; its additional text changes the *alternatim* pattern. The existence of mass items using the troped Marian *Gloria* in Italian sources has been noted by scholars but no cross-regional comparison of the *alternatim* patterns has been made.⁷⁰ TJL and each Italian source contains one Marian *Gloria*.⁷¹ The schemes are provided in table A.3 in appendix A and show a codified practice in three Italian sources. Although the Marian mass in the Gabrieli source uses the untroped *Gloria* scheme, the differences in the three sources suggest that musicians

⁷⁰ Apel mentions the Marian *Gloria* but does not state how the scheme is altered by the additional text (*The History*, 93, 112, 116, & 122). Higgenbottom only states that Cavazzoni's Marian *Gloria* has 12 versets for the organ ("Organ Music and the Liturgy," 132). Schaefer provides patterns for the Marian *Gloria* ("Bernardino Bottazi's *Choro et Organo*," 54–56). No one mentions the single Marian *Gloria* in TJL.

⁷¹ The *Gloria* from the second cycle *de Domina* is also found in Polish graduals with the trope *spiritus alme* and could be considered a Marian *Gloria* as well. However, the versets for this item follow the same scheme as untroped *Gloria* items. Their cantus firmi match BOS037, which is found twice in PL-Kk-44, on 11r with the trope and on 15v without the trope. The latter, untroped version immediately follows MEL111, the chant used for the *Kyrie* in *de Domina*, and may be the basis for the versets in TJL. Buchner may have written two Marian *Gloria* items; their cantus firmi could not be definitively identified but somewhat resemble chants known to exist with the trope *Gloria spiritus et alme*, However there is no difference in verset titles suggesting that, if they are in fact Marian, the troped text did not affect the scheme.

Adapted to text changes in order to maintain balance in the alternatim. The Gloria de Sancta Maria Sabbatinis Diebus (no. 12 in TJL) provides an organ verset for the text Qui tollis . . . nobis; the untroped Gloria items in TJL have a verset for the text Qui sedes . . . nobis instead. Patterns for the remainder of the Gloria de Sancta Maria Sabbatinis Diebus cannot be determined. It is unlikely that the choir sang the last eleven phrases continuously. The organ likely improvised additional versets because repetition of existing versets is not possible; the cantus firmi in the organ versets do not correspond to any other melodic phrases in the original chant.

The existence of a universal or regional pattern in the *Credo* is more difficult to discern because this mass item is supplied in sources from only three regions: Italy,⁷² France, and Poland. There is no standard pattern shared across multiple regions, as seen in table 2.7, but the four Italian sources containing *Credo* items share the same pattern (see table A.3 in appendix A). Like the *Gloria*, the priest chants the first phrase; the remaining text alternates between choir and organ. Phrases 2, 4 and 6 are for the organ; the subsequent organ verset corresponds to phrase 9, so the choir must have sung phrases 7 and 8 together. The pattern in the Attaingnant source is based only on its single *Credo* that begins somewhat similarly, but twice, at phrases 2 and 8, a single phrase is divided into three sections with the alternation Organ–Choir–Organ. Although no verset is supplied for phrase 6, the verset for phrase 2c (*visibilium omnium et invisibilium*) may have been repeated as the chant melody matching the cantus firmus is identical for this phrase. From phrases 10–16, some repetitions might be possible but the melodic repetition in the chant does not precisely match complete cantus

⁷² Although post-Tridentine reforms assigned the entire text to the choir, Edward E. Schaefer describes exceptions in which the corresponding text was spoken during organ's versets in 49–52. The practice continued into the seventeenth century; Italian organ masses frequently contain a *Credo* item.

firmi in any of the existing versets. Overall, a pattern for the complete *Credo* in the French tradition cannot be determined.

Table 2.7. Credo Alternatim Patterns.

Phrase Number	Text	TJL	All Italian	Attaingnant
1	Credo in unum Deum,	Priest	Р	Р
2	Patrem omnipotentem, invisibilium.	Org	Org	Org, C, Org
3	Et in unum Dominum, unigenitum.	V	С	↓
4	Et ex Patre sacula.	С	Org	Org
5	Deum de Deo de Deo vero.	↓	С	С
6	Genitum, non factum facta sunt.	↓	Org	Org, rpt
7	Qui propter nos de cælis.	Org	С	С
8	Et incarnatus factus est.	V	\rightarrow	Org, C, Org
9	Crucifixus etiam et sepultus est.	С	Org	С
10	Et resurrexit Scripturas.	Org, rpt	С	5.
11	Et ascendit in cælum Patris.	V	Org	5
12	Et iterum venturus non erit finis.	С	С	5
13	Et in Spiritum Sanctum, procedit.	5	Org	5
14	Qui cum Patre per Prophetas.	5	С	5
15	Et unam, sanctam, Ecclesiam.	5	V	5
16	Confiteor unum baptisma peccatorum.	5	С	5
17	Et expecto resurrectionem mortuorum.	}	Org	Org
18	Et vitam venturi sæculi.	5	С	С
19	Amen.	5	Org	Org

KEY: **Org** = organ verset | **C** = choir | **P** = priest or cantor | **V** = varies | **Org, rpt** = repeat an organ verset ↓ = previous party continues | **?** = indeterminate due to missing versets or inability to trace cantus firmus

Sources: Some data adapted from Holton Prouty, "The Italian Organ Mass," 48–56.

The pattern in the *Credo* items from TJL differs significantly from both Southern sources, and a unified scheme cannot be determined. TJL contains three different settings of the *Credo*.⁷³ Only two versets, *Patrem* (phrase 2) and *Qui propter nos* (phrase 7), are provided in each; without repetition of versets, more than half the text would be chanted without alternation. The organist may have recycled the two versets because the chants used for these three settings have a repeating melodic structure.⁷⁴ When examining the cantus firmi of these versets, I considered different options for repetition using the method described at the end of sec. 2.5. The alignment between melodic repetition and text in each chant results in different options for recycling organ versets. Furthermore, although two *Credo* items (fols. 38v and 142v) are based on the same melody (MZG33B), their cantus firmi have several differences resulting in additional repetition options.

The results of my examination of the *Credo* items suggest three different possible alternatim patterns (see table 2.8). The pattern through phrase eight is generally the same. However, the cantus firmus from the *Patrem* verset on 38v adds phrase three, and the cantus firmus from the *Qui propter nos* verset on 69r extends into phrase eight, ending at *de Spiritu Sancto*. These extensions affect the repetition options for phrases nine through nineteent, for which no organ versets are provided. The structure of the chant (MZG531B), from *de Domina*, produces a straightforward, symmetrical scheme. Each organ verset may be repeated once—the *Patrem* verset at *Et resurrexit* (phrase 10) and the *Qui propter nos* verset at *Et unam sanctam* (phrase 15)—because the versets' cantus firmi match the chant melody here.

⁷³ As previously discussed in sec. 2.2, three of the *Credo* sets share identical versets in such a way that there are only two different sets (see fig. 2.1). The *Credo* from *de Domina* is based on a different chant so, in total, there are three different settings of the *Credo*.

⁷⁴ The melodic structures of MZG531B and MZG33B are discussed in detail in section 2.3. Complete transcriptions of the *Credo* chants, marked with points of repetition, are found in figs. B.1 and B.2 in app. B.

Table 2.8. Possible Credo Alternatim Patterns in TJL.

Phrase Number	Text		TJL 69r–70r (MZG531B)	TJL 142v–143r (MZG33B)	TJL 38v–39r (MZG33B)
1	Credo in unum Deum,		P	P	P
2	Patrem omnipotentem, invisibilium.		Org	Org	Org
3	Et in unum Dominum, unigenitum.		С	С	↓
4	Et ex Patre sæcula.		\	\downarrow	С
5	Deum de Deo de Deo vero.		\downarrow	\downarrow	\downarrow
6	Genitum, non factum facta sunt.		↓	\downarrow	\downarrow
7	Qui propter nos de cælis.		Org	Org	Org
8	Et incarnatus factus est.		Org, C	С	С
9	Crucifixus etiam et sepultus est.		С	\downarrow	\downarrow
10	Et resurrexit Scripturas.		Org, rpt*	Org, rpt†	Org, rpt†
11	Et ascendit in cælum Patris.		↓	С	С
12	Et iterum venturus non erit finis.		С	\downarrow	\downarrow
13	Et in Spiritum Sanctum, procedit.		\downarrow	\downarrow	Org, rpt†
14	Qui cum Patre per Prophetas.		↓	Org, rpt†	С
15	Et unam, sanctam, Ecclesiam.		Org, rpt†	С	\downarrow
16	Confiteor unum baptisma peccatorui	m.	\downarrow	\downarrow	Org, rpt†
17	Et expecto resurrectionem mortuorum.		С	Org, rpt†	С
18	Et vitam venturi sæculi.		\downarrow	\downarrow	\downarrow
19	Amen.		\downarrow	V‡	\downarrow
C = P = V = Org	g = organ verset choir priest/cantor varies g, rpt = repeat an organ verset previous party continues	† The <i>Q</i> ‡ The re for ph	atrem verset can ui Propter nos ver epeated verset co rases 17–19. Alt the Choir shoul	eset can be repeated ould function as ternatively, if a s	ated here. a paraphrase strict reading is

There are no other options for repetition because the distinctive motive that begins phrases two, seven, ten and fifteen does not occur anywhere else in the chant (see figure B.1 in appendix B).

The *Credo* items based on MZG33B have two possible schemes due to differences in their cantus firmi and the melodic structure in the chant. Only the *Qui propter nos* verset can be repeated; neither of the cantus firmi suggest that the *Patrem* could be repeated. One option (col. 4, table 2.8) repeats the *Qui propter nos* verset on fol. 143r (duplicated on fol. 203v) at phrases ten, fourteen, and seventeen, but another scheme (col. 5, table 2.8), using the *Qui propter nos* verset on fol. 39r, repeats this verset at phrases ten, thirteen, and sixteen. These proposed schemes rely on repeating the *Qui propter nos* verset three times, an admittedly odd practice. Thus, TJL lacks conclusive evidence to suggest a pattern for phrases 9–19. The *Patrem* and *Qui propter nos* versets may have been included in TJL for convenience, with improvisation assumed for the remainder of the *Credo*, or as models for the student. Although it is possible that the *Credo* had an unbalanced pattern that assigned all phrases from nine onward to the choir, this is the least likely explanation because all other mass items have a reasonably symmetrical pattern and organists could have improvised versets. Consequently, the overall analysis shows a similar pattern in the first half of the *Credo* but is inconclusive in the second half.

Thus far the *alternatim* patterns and regional chant repertoire demonstrate a distinctive, consistent liturgical practice in Poland. The differences in *alternatim* patterns between Northern and Southern Europe are significant because they can influence the compositional style of the versets. Grouping phrases of text together results in longer organ

⁷⁵ The only close candidate is the second half of phrase eight through the end of nine for the *Patrem* verset on 38v (also duplicated on 202v). However, the organ has just played for phrase seven and, based on general trends in TJL's masses, it is unlikely that the choir would sing only half a phrase followed by the organ's entrance mid-phrase.

⁷⁶ In a concert on May 29, 2018 (see preface and appendix C), I followed the pattern in col. 3 in table 2.8 for the *Credo* from *de Domina* (fol. 69r) For the third mass cycle, the choir sang phrases eight through nineteen continuously with a less-satisfying result that interrupted the flow between choir and organ.

versets which provides an opportunity for structural complexity. The *Et in terra pax* versets from all three mass cycles exemplify this structural complexity, a topic treated in chapter 4. The regional repertoire and its pairing with universal chants in the first and third mass cycles raises questions about the liturgical occasions on which these mass cycles were played, namely, did these masses serve the same function in Poland as they did elsewhere?

2.7. The Liturgical Calendar and Chant Rubrics

The sixteenth-century church organist's responsibilities were listed in a contract which specified what to play, including which chants were to be performed in *alternatim* with the choir, and when, usually listed by the feast day in the liturgical year. Organists typically improvised on the chant corresponding to that part of the mass. Even though the Mass Ordinary was repeated regardless of the feast, there were multiple chants for each component's text (e.g. *Kyrie*), corresponding to different seasons and feasts in the liturgical year. Thus, the rubrics preceding the Mass Ordinary chants in liturgical books (which include missals and other types containing chants or their incipits) shed further light on liturgical practices because they can identify when any given organ mass item was used.

These rubrics make possible an accurate comparison of organ masses from different regions because functions are generally the same even when the chants are regional. The most codified tradition is found in the Italian sources, the manuscript Castell' Arquato and the published masses by Cavazzoni, Gabrieli, and Merulo. These composers consistently set chants from the same three mass cycles. These corresponding organ masses became identified by their feast name or occasion, seen in table 2.9, and acquired the common names Missa degli Apostoli (feasts of the Apostles), Missa della Madonna (Marian feasts), and Missa della

Domenica (ordinary Sundays),⁷⁷ though the composers may use variants of these names. A comparison of the extant Italian organ masses shows that they follow the same chant groupings found in *Graduale Romanum* 1499 and 1560; the latter is an abbreviated gradual containing five mass cycles. Notably these mass cycles are still in use today.

Table 2.9. The Italian Organ Mass Tradition.

Feast	Common Name	Graduale Romanum 1560	Melody ID (Graduale Romanum 1560)	Vatican Chant*
Apostles	Missa degli Apostoli	de Apostolis	Ky MEL018, Gl BOS056, Cr MZG319B Sa THA049, Ag SCB136	Kyrie cunctipotens genitor Deus (Mass IV)
Marian Feasts	Missa della Madonna	de Domina	Ky MEL171, Gl BOS023 Cr MZG279B (Vatican IV) Sa THA032, Ag SCB034	Kyrie cum jubilo (Mass IX)†
Ordinary Sunday	Missa della Domenica‡	de Dominica ‡	Ky MEL016, Gl BOS051 Cr MZG094A (Vatican 1)§ Sa THA202 Ag SCB220	Kyrie orbis factor (Mass XI)

KEY: Ky = Kyrie, Gl = Gloria, Cr = Credo, Sa = Sanctus, Ag = Agnus Dei

Note: The chants in *Graduale Romanum* 1560 are grouped into complete cycles with a *Credo*; titles in the third column are taken from GR 1560. The melodies are the same as the Vatican chants, except for Mass IX.

The three organ masses in TJL correlate somewhat with the Italian practice (see table 2.10) but with several important distinctions. First, there is no mass for feasts of the

^{*} Vatican chant refers to the designations found in twentieth-century sources (*Liber Usualis* 1961 and *Graduale Romanum* 1974).

[†] Mass IX uses Sanctus THA033 and Agnus Dei SCB114 instead. The Kyrie and Gloria are identical.

[‡] There is a nuanced difference between *Domenica* (Sunday) and *Dominica* (The Lord's Day), but the function is the same. Ecclesiastical sources generally use the term *Dominica*.

[§] Miazga lists 182 variations of a single chant; these comprise Group A (*Die Melodien*, 18–41). None exactly match the version in GR 1560; the most similar is MZG094A from a 15th-century Italian source (I-MOe-lat. 1009). Other similar chants from Italian sources are 124A, 139A, 140A; several German sources contain similar variants as well (58A, 59A, 71A).

⁷⁷ Ordinary Sundays apply to each Sunday that does not coincide with a more important feast day or liturgical season, in which case the chants for the more important occasion apply.

Apostles. Although the cantus firmi of the *Kyrie* and *Gloria* in the first mass cycles is the same as the Italian *Missa degli Apostoli*, they are almost always found in Polish liturgical sources with the rubric *per octavas*. As previously noted, this first mass cycle uses a different *Sanctus* and *Agnus Dei*, also titled *per octavas*. Thus, the first mass was used one week after a major feast, the eighth day including the feast day. Second, *Sollemne*, the third mass cycle based on *Kyrie fons bonitatis*, does not have a counterpart in Italian organ masses.

Table 2.10. Comparison of Mass Cycles in TJL to the Italian Organ Mass Tradition.

Feast	Italian Organ Mass (by common name)	Organ Mass Cycles in TJL	Comparison to Italian Tradition
Apostles (Mass IV)	Missa degli Apostoli	Officium per Octavas	Per octavas pairs different chants for Sanctus and Agnus Dei.
Marian Feasts (Mass XI)	Missa della Madonna	de Domina	de Domina uses regional, Central European chants.
Ordinary Sunday (Mass IX)	Missa della Domenica	No organ mass	No corresponding mass items or cycles in TJL.
Solemn Feasts (Mass II)	No organ mass	Officium Sollemne	Officium Sollemne uses the same Kyrie but different chant for the remainder.

Its chants often lack a rubric in Polish graduals, but they were used for the most important feasts because, as previously noted, the *Kyrie & Gloria* and *Sanctus & Agnus Dei* pairs for this mass are typically in a prominent place with accompanying miniatures in Polish graduals (see p. 33). When provided, the rubric is some variation of *Solenne, Solenne, Festis Summis*, or *Festis duplicibus* [double feasts]. Today these rubrics correspond to feasts of the first class, Mass II, whose chants are found in the same configuration on fols. 131v–133v in *Graduale Romanum* 1499. Thus, the third mass was used for the same feasts that Mass II would be used for

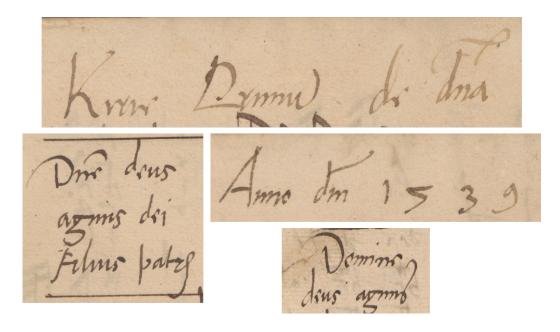
today, although the mass in TJL is based on different chants for the *Sanctus & Agnus Dei*. Third, *Missa della Domenica* (ordinary Sundays) does not have a counterpart in TJL, nor are its melodies, which are the same in the four Italian organ masses, found in any organ mass in Polish sources. Fourth, although the second mass cycle *de Domina* fulfills the same function as the Italian *Missa della Madonna*, it does not use the chants of Mass XI.

De Dominia from TJL was previously identified as de Dominica, designating ordinary Sundays, but its regional chants show that it is a Marian mass. The corresponding chants Kyrie MEL111 and Gloria BOS037 (see n. 71 above), paired in Polish sources, most frequently bears the rubric de BMV [Beata Maria Virgine], designating Marian feasts. Several other Central European sources show the same rubric, and the Hungarian Graduale Wladislai II designates it Minus de Domina. These rubrics also provide supporting evidence that de Dominica, the title under which it was previously published, is a transcription error. The top image in figure 2.3 shows that the title of this mass uses the abbreviation dna. The remaining images confirm that the scribe uses the common Latin abbreviation dn for the stem domin. The word dominica and its abbreviation are not found elsewhere in TJL for comparison, but dom is the typical abbreviation. Furthermore, Graduale Romanum 1560 titles its second mass cycle de domina on fols. 101v–105r—this mass contains Kyrie cum jubilo (MEL171) and the chants used in Missa della Madonna (see table 2.9). Thus, de dna must be an abbreviation for de domina and designates a Marian mass based on the rubrics for its Kyrie and Gloria.

⁷⁸ Minus de Domina designates lesser Marian feasts. In Hungarian sources, MEL111 is usually paired with BOS027 and has the rubric *De virginibus*. In a few Wroclaw sources, which represent a German-Polish mix, it is paired with BOS005 instead, but still designated de BMV. See Kiss et al., *Ordinariums-Gesänge*, 107–160.

⁷⁹ Both Wilkowska-Chomińska (*Tabulatura Organowa*, 23 & 51) and White ("The Tablature of Johannes of Lublin," 148) transcribed this abbreviation as *de dominica*. Interestingly Wilkowska-Chomińska listed only the first and third masses as complete cycles in her alphabetic catalog (50–51). The second mass is listed separately with the independent mass items, suggesting that she did not consider this mass a complete cycle.

Figure 2.4. Title of the Second Mass Cycle and Comparison of Similar Abbreviations. Digital images courtesy of The Scientific Library of the Polish Academy of Learning and Sciences, Krakow.



Although Polish and other Central European liturgical sources contain *Sanctus* and *Agnus Dei* chants whose rubrics designate Marian feasts, the accompanying *Sanctus* THA039 and *Agnus Dei* SCB056 are frequently marked *per octavas* in Polish graduals, which raises questions about the integrity of this mass as a cycle. Nonetheless, evidence suggests that here the designation *per octavas* refers to the octave of Marian feasts only, not the octave of other feasts. In the earlier fifteenth-century *Graduale de tempore et de sanctis* (PL-Kj ms. 1267 V), *Sanctus* THA039 and *Agnus Dei* SCB056 are marked *per octavas* with the handwritten addition *de BM Virgine* on fol. 186r. Although this gradual lacks *Kyrie* MEL111, possibly due to a lacuna in the folios, this chant in *Graduale ecclesiae* *de sanctis* (1536), from the Gniezno

⁸⁰ Graduale de tempore et de sanctis, ms. 1267 V, Jagiellonian University Library, digital scan, accessed October 1, 2019, https://polona.pl/item/graduale-de-tempore-et-de-sanctis,MTAvNDQvNTk0/376/#item.

diocese in Poland, has the rubric *Per octavas solemnes BMV* and is paired with *Gloria* BOS037.⁸¹ The lacuna in the Gniezno gradual are unfortunately where the *Sanctus-Agnus Dei* pairs would be located. The rubrics from PL-Kj-1267 and *Graduale ecclesiae* . . . *de sanctis* (1536) suggest this mass is intended for the octave after Marian feasts, rather than the feast itself, for example, August 22nd for the octave of the Assumption (August 15th). Although many other Polish graduals do not add a Marian designation to the rubric *per octavas*, this particular *Sanctus* & *Agnus Dei* pair is sometimes listed after a pair with a Marian rubric and is designated *item aliud* (another one).⁸²

Additionally, the use of this particular *Sanctus & Agnus Dei* does not exclude the possibility of using this mass on the Marian feast itself. Several entries giving Mass Propers for two Marian feasts in *Graduale de sanctis*, vol. 2 of the Olbracht gradual, repeat the same chants from the primary feast again on the octave (indicated by the rubric *omina ut ipso die*). The actual feast days both use the *Introit Gaudeamus omnes*.⁸³ Two settings of this *Introit* precede *De domina* in TJL (see the discussion in sec. 3.3, ch. 3), suggesting that *de Domina* could be used for the feast day and again on the octave.

An examination of the rubrics corresponding to the independent mass items shows that these fulfill additional liturgical functions, rounding out the collection of organ masses. Several of these use cantus firmi based on universal chants: *Ky[rie] e[leys]on de Sancta Maria* on fol. 186v uses *Kyrie cum jubilo* (MEL171), also the basis for *Missa della Madonna*, and several sets with variants of the title *Kyrie paschale* use *Kyrie lux et orgio* (MEL039). In addition to

⁸¹ Kiss et al., Ordinariums-Gesänge, 151.

⁸² Kiss et al., Ordinariums-Gesänge, 148 & 154.

⁸³ Taduesz Miazga, *Graduał Jana Olbrachta: Studium muzykologiczne* [The Jan of Olbracht Graduals: A Musicological Study] (Graz: Akademische Druk u. Verlangsanstalt, 1980), 108–111.

Ky[rie] e[leys]on de Sancta Maria, two other items correspond to chants with Marian rubrics: Ky[rie] e[leys]on de Sancta Maria t[em]p[or]e adventus (MEL132) on fol. 189v and the Gloria titled de Sancta Maria Sabatinis Diebus (BOS023) on fol. 224v. This Gloria chant is paired with Kyrie cum jubilo (MEL171) in Polish graduals, suggesting that it and Ky[rie] e[leys]on de Sancta Maria on fol. 186v can function as a set, despite their separate locations within the manuscript.

To summarize, the variety of chants used in the organ masses shows a comprehensive approach to setting the most important chants in the liturgical calendar. The titles of organ mass items in TJL are generally the same as the rubrics for their corresponding chant as found in Polish liturgical books. Analysis of the chant identifications and their rubrics shows the organ masses in TJL represent a regional tradition, even when they are based on a universal chant. The three mass cycles also demonstrate an intentional grouping to fulfill a liturgical occasion. Although the second mass cycle *de Domina* is the most difficult to classify because its rubrics vary, it is definitely a counterpart to the Italian *Missa della Madonna*, perhaps used for lesser Marian feasts such as the octave after the Assumption and octave after the Immaculate Conception. Further examination of the three mass cycles suggests that they were the result of a collaboration between two scribes. All three masses, particularly *de Domina*, may have existed as independent mass items which were grouped into complete cycles at the time the manuscript was bound. Investigation into this possibility involves discussion of the handwriting and folio layout, which is the topic of chapter 3.

CHAPTER III

TWO SCRIBES AND THEIR COLLABORATION ON THE ORGAN MASSES IN TIL

In the course of this research I discovered that two scribes' handwriting are found in alternation in the organ masses and several other compositions. This discovery raises issues regarding folio order and other physical aspects of the manuscript, including past debates about the existence of multiple scribes' handwriting in TJL.

3.1. Evidence for Two Scribes

Although several scholars have observed the handwriting of multiple, different scribes in TJL, they disagree regarding the number of scribes and which folios to attribute to each one of them. Adolf Chybiński believed that TJL was the work of one scribe with the exception of several pages in another hand. John R. White referred to "seven pages in the middle" by another scribe, but did not provide folio numbers. Krystyna Wilkowska-Chomińska identified four different scribes while Elżbieta Witkowska-Zaremba and Meike

¹ Dobrzańska-Fabiańska, "Johannes of Lublin's Tablature," 90. Chybiński observed a different hand on 188r–189r and 198v–199r. The latter folios contain *Recicar bello*, which is *Canzon sopra I le bel e bon* by Girolamo Cavazzoni and an unknown composition with the annotation *Ipsius enim*.

² White, "The Tablature of Johannes of Lublin," 138.

³ "Bezwzględna większość kart rękopisu wykazuje ten sam charakter pisma. Poza tym występują jeszcze trzy inne [The absolute majority shows the same character of writing. Also joining are three more]: drugi [second]— fol. 21v–27v, 62r–64v, 66v–70r, 71v–72v, 137v—144r, 159v—160v, trzeci [third] — fol. 188r–189r, 197v–199v, czwarty — na końcu rękopisu [fourth at the end of the manuscript], fol. 259v—260r, i w końcowej części traktatu [and the closing section of the treatise], fol. 14r." Wilkowska-Chomińska, introduction to *Tabulatura Organowa* by Johannes of Lublin, ed. Krystyna Wilkowska-Chomińska, Monumenta Musicae in Polonia, Seria B, vol. 1 (Warszawa: Polskie Wydawnictwo Muzyczne, 1964), 6. Gancarczyk also found Chomińska's scribe 2 on fol. 101r-101v and observed that 90 percent of TJL is in one hand in "Uwagi kodykologiczne o Tabulaturze Jana z Lublina (1537-1548)" [Codicological Remarks about the Jan of Lublin Tablature], *Muzyka* 41, no. 3 (1996): 45–58.

Wilfing-Albrecht have both identified two different hands in the treatise *Ad faciendum cantum choralem* (hereafter "*Ad...choralem*") on folios 1r–14v—one scribe for the main text and another for the musical examples and textual annotations. Wilfing-Albrecht also disputes Wilkowska-Chomińska's differentiation among Scribe 1, Scribe 2, and Scribe 4, and states the differences are explained by changes in handwriting over time. She considers Scribe 1 and Scribe 2 to be the same person (renamed Scribe A) and identifies two different scribes on the folios attributed to Scribe 4.⁴ Although I agree with some of Wilfing-Albrecht's findings, I disagree with her conclusion that Scribes 1 and 2 are the same. The following table cross-references the different names used by different scholars.

Table 3.1. Names for the Different Scribes Found in TJL.

Fancey	Wilkowska- Chomińska	Wilfing-Albrecht	Witkowska- Zaremba ¹
Primary	Scribe 1	Scribe A	Older Scribe
Secondary	Scribe 2	Scribe A	
Tertiary	Scribe 3	Scribe C	
Mix of Primary and Quaternary/Student ²	Scribe 4	Mix of Scribe A and Scribe B ²	Mix of Older and Younger Scribe ²

¹ Witkowska-Zaremba's work concerned only the didactic portions, and the handwriting of the Secondary and Tertiary Scribes is not found on those folios.

My handwriting analysis is based on the original manuscript and shows that there are definitely four scribes in the tablature. As seen in table 3.1 above, my findings differentiate between Wilfing-Albrecht's single Scribe A and Wilkowska-Chomińska's Scribe 4, although I

² Both Wilfing-Albrecht and Witkowska-Zaremba identified two different scribes within the folios that Wilkowska-Chomińska attributed to Scribe 4. The breakdown by folio is listed in table A.4 in appendix A.

⁴ Meike Wilfing-Albrecht, "Deutsche Musik in Polen: Ludwig Senfls Motetten in der Tabulatursammlung des Johannes von Lublin" (M.A. diss, Universität Wien, 2013), 23–24.

agree with the latter's Scribes 1, 2 and 3. For the purposes of clarity, I will refer to the scribes according to my classification listed in Column A—using male pronouns because scholars believe that the Primary scribe is Johannes of Lublin himself and TJL is from the monastery of the Canons Regular in Kraśnik. In this study of the organ masses, only the handwriting of the Primary and Secondary scribes are relevant. The folios in the hand of Tertiary contain secular music only (see n. 3 above). The sections of the manuscript that are attributed to Quaternary are all within the two treatises Ad... choralem and Ad faciendam correcturam, where the handwriting of Primary and Quaternary alternates. For a summary of my folio attributions for the complete manuscript, including a cross-reference of findings by multiple scholars, see table A.4 in appendix A. This table also includes my identification of a few additional folios in which the script of individual compositions alternates between two scribes, a very unusual occurrence in organ manuscripts of this time.

My analysis found consistent, distinctive differences between the handwriting of the Primary and Secondary scribes. Although both scribes use a canonical script that is different from other organ tablatures of the time,⁵ the uniqueness of each scribe's handwriting can be established on the basis of three letters: miniscule g, d, and e. As the letters marked by blue pentagrams in figure 3.1 show, Primary starts the g with a rounded lobe then continues the stem down and turns left at a sharp angle. Comparison to the miniscule g marked by red pentagrams in the first system shows that Secondary's handwriting is defined by its two forms of the miniscule g.

⁵ Many German organ tablatures from the same time period and the Holy Ghost Tablature (TKD) share the same canonical script, but the script found in TJL and two earlier Polish organ tablature fragments is distinctly different. See figure 4.7 in ch. 4.

Figure 3.1. Comparison of Handwriting Showing Distinctive Letters by Both Scribes. Digital image courtesy of The Scientific Library of the Polish Academy of Learning and Sciences, Krakow, and modified by the author.



The first has one stroke—the lobe begins with a sharp "v" shape and the descender circles around in an oval to create a top stroke that closes the v. The second has two strokes, the descender angled and separate from the top stroke. Primary writes only one type of e; the stem of the e typically slopes upward to the left and is topped with a small lobe on the upper right (compare circled letters in systems one and two in figure 3.1). Secondary writes in two styles for the miniscule e: One is similar to Secondary's but has a hook rather than a small lobe. The second style, which does not appear in the example above, resembles a modern miniscule c (see fig. 3.2 and n. 8 below). The miniscule d, outlined by rectangles, is also quite

distinctive for each scribe. Secondary writes a straight, smooth stem with a slanted oval lobe. Primary almost always crosses the stem horizontally—creating a small finial on the right—and the lobe has a different shape.

My confirmation of the distinct handwriting between Primary and Secondary expands upon earlier findings and provides new insight into the repertoire in TJL. A folioby-folio attribution to each scribe by handwriting shows that, in accordance with earlier findings, Primary wrote the majority of the manuscript and that Secondary's work focused on liturgical organ music. Table 3.2 below lists these compositions by title and indicates which portion was inscribed by Secondary. Nine are for liturgical use, consisting of versets for the Mass Ordinary & Mass Proper, as well as part of a hymn for the Office of the Hours. Secondary has written only one entry among the non-liturgical works in TJL, an annotated correction to *Conradus* on fol. 37r. This annotation and several other folios, all identified with a dagger, are new attributions to Secondary and provide evidence of a collaboration with the Primary scribe.

3.2. Interactions between Two Scribes Evidenced in the Manuscript

These additionally identified folios containing Secondary's handwriting evidence that he and Primary worked together on individual compositions several times. This is significant because two different scripts within the same composition has not been previously documented in organ music manuscripts of the fifteenth and sixteenth centuries. Although changes in scribe handwriting are frequently found in extant organ manuscripts, the handwriting is always consistent within an individual composition. Changes in handwriting typically show changes in ownership when the new owner enters additional compositions.

Table 3.2. Folio Attribution to Secondary Scribe. Titles match the manuscript.

Title and	Description	Portions by Secondary Scribe
1. Officium Per octavas (1	st mass)	21v–27v
2. Annotated correction equaling 2 breve valu	n to "Conradus" (4 columns es).	37r SIII, col. 9–12 [†]
3. Middle portion of Ch	porus nove Jerusalem [‡]	47r SII−47v SIV [†]
4. Preambulu[m] In G p[e	r] B	62r
5. Gaudeam[us] Omnes ar	nd <i>Gloria Patri</i>	62v-64r
6. The majority of de D	∫omi]na (2 nd mass)	64v, SI only [†] 66v–69r SII (except 67r SV and 68r SIV &V) [†] 69v SIV–70r [†] 71v–72v
7. The majority of Laud	latae dominum omnes gentes	101r SIII–101v SII
8. A portion of Et om[n]es, (from P[at]ris sapi[ent]a)	123v SII–124v SIII [†]
9. The majority of Office	ium Sollemne (3 rd mass)	137v–144r SIII
10. Justus es, domine		159v–160v SIII

S = system, designated by Roman numerals to distinguish them from folio numbers, and to show division of scripts on the same folio as applicable. If no systems are specified, the entire folio is attributed to Secondary.

TJL is unique because it contains evidence that Primary and Secondary worked on the manuscript *at the same time*. As seen in table 3.3, several compositions change handwriting partway through, 6 and several others have annotations.

col. = column. The manuscript lacks bar lines, but layout of the alto, tenor and bass visually divides into columns at the half-breve level (equivalent to the half note in existing transcriptions) and aligns rhythmically with the discant.

[†] My new discoveries. Wilkowska-Chomińska attributed all of 64v and 66v–70r to Secondary, but there is no mention that these folios contain passages in the hand of Primary Scribe. See table A.4 in appendix A for a detailed attribution of each folio that cross references past research.

[‡] The handwriting is very similar with the exception of capital G which is consistently atypical. The overall appearance suggests that the scribe was writing quickly and/or had some difficulty writing, perhaps due to age or a medical condition.

⁶ Among versets for the Mass Ordinary, the mass cycles are the only versets to show this alternation. Secondary's hand is not seen in the independent mass items, some or all of which may have been entered later on blank pages after the manuscript was bound.

Table 3.3. Description of Scribes' Collaboration. Titles match the manuscript.

Tit	le	Folio*	Scribe	Genre	Description
1.	Conradus	37r SIV– 37v SIII	Primary	Dance	Annotated correction of missing measures by Secondary on 37r SIII.9–12. Verset by Primary.
2.	Chorus nove Jerusalem	46v, SI– 48v, SII	Both	Liturgical, Office Hymn	Alternates between two scribes within the verset.
3a.	[Missa] de Domina†	64v, SI– 72v, SV	Both	Liturgical, Mass	5 versets by Primary (including 3b and 3c), 7 by Secondary. Additional collaboration described below in 3b–3d.
3b.	[Missa] de Domina: Kirie Primum de d[omi]na	64v, SI– SIV.2	Both	Liturgical, Mass	Alternates between two scribes within the verset: First system by Secondary, remainder by Primary.
3c.	[Missa] de Domina: Patrem p[er] octavas N. C. 1540	69r, SIV– 69v, SIII	Primary	Liturgical, Mass	Annotated correction to syncopation layout by Secondary.
3d.	[Missa] de Domina: Qui Propt[er] nos homines	69v, SIV– 70r, SV	Secondary	Liturgical, Mass	Annotated alternate ending by Primary.
4.	Laudatae dominum omnes gentes	100v, SIV– 101v, SII	Both	Liturgical, Mass Proper	Alternates between two scribes within the verset.
5.	Et om[n]es, (from P[at]ris sapi[ent]a)	122v, SII– 124v, SIII	Both	Liturgical, Office Hymn	Alternates between two scribes within the verset.
6.	[Missa] Officium Sollemne	137v, SI– 146r, SV	Both	Liturgical, Mass	Three versets by Primary, ten by Secondary. No annotation to or alternation within versets.

^{*} S = system, designated by Roman numerals to distinguish them from folio numbers.

My examination of all the occurrences of two different scripts within the same composition shows a collaboration between Primary and Secondary. The list in table 3.3 shows that this collaboration occurs nine times in the following ways: First, the handwriting

[†] Wilkowska-Chomińska attributes all of 66v–70r to Secondary but neglects to mention that these folios contain a fragment, a clausula, and one verset (*Patrem per octavas* on 69r, SIV–69v, SIII) in the hand of Primary Scribe.

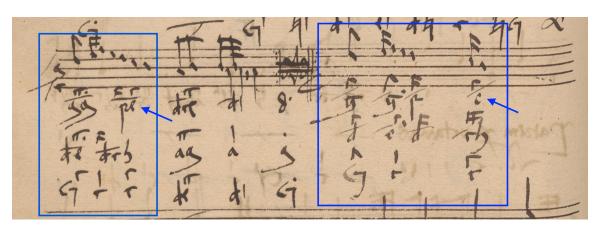
alternates between consecutive versets within a mass (nos. 3a, and 6); Second, some versets are written by both scribes and change scripts partway through (nos. 2, 3b, 4, 5, and 6); Third, one scribe annotates the other's work in three places—two within [Missa] de Domina (nos. 3c, and 3d), and the third, a correction to Conradus on fol. 37r SIII (no. 1).

Although these types of collaboration might suggest a teacher-student relationship, further examination negates this explanation. In the first Kyrie from the second mass cycle de Domina, the first system begins in the hand of Secondary, but the remainder of this and all subsequent Kyrie versets are completed by Primary (no. 3b in table 3.3). This alternation in scripts could suggest that Secondary was a teacher. He could have provided an incipit and asked his student Primary to complete the verset. Extending this further, after completing this Kyrie, Primary might have been tasked with writing complete versets to complete the second and third mass cycles (nos. 3a and 6 in table 3.3). However, one occurrence of script alternation between versets in the second mass cycle shows that Primary supplies the first verset titled *Patrem* for the *Credo* and Secondary completes this section with *Qui propter nos* the reverse order if Primary is finishing mass items begun by Secondary. Consideration of all the folios listed in table 3.3 in the hand of Primary suggests that he was already skilled by the time of the collaboration. Among the three annotations only one is an error correction by Secondary to Primary's work: the addition of missing measures for *Conradus* on fol. 37r (no. 1 in table 3.3). Furthermore, the vast majority of TJL is written in the hand of Primary, and consideration of the manuscript as a complete entity does not suggest that he was a student. On the contrary, another section suggests that Primary was a teacher: In the treatise Ad...choralem, Primary has written the musical examples, and the Quaternary scribe, most likely a student, entered the text (see table A.4 in app. A). Primary corrects and annotates the

student's copy of the text in multiple places.⁷ Three instances of alternation within versets (nos. 2, 4 and 5 in table 3.3) do not have any pattern among them to explain the change in handwriting. Overall it is unclear why the handwriting alternates between scribes in different versets as well as within the same verset.

Two additional annotations (no. 3c and 3d) from the second mass cycle offer insight into pedagogical intent and suggest that Secondary, while not Primary's teacher, was the senior musician of the two. Number 3c (*Patrem* on 69v, SIII) shows that Secondary rewrote several beats originally entered by Primary but these only differ regarding the layout and grouping of the syncopation (see figure 3.2). The boxed passage on the right is Secondary's rewriting of the boxed passage on the left with the syncopation clarified. None of the pitches have changed; the arrows point to miniscule e, which is one identifier for each scribe's handwriting.⁸

Figure 3.2. Comparison of Two Identical Passages Showing a Layout Correction by Secondary Scribe. Digital image courtesy of The Scientific Library of the Polish Academy of Learning and Sciences, Krakow, and modified by the author.



⁷ Witkowska-Zaremba, introduction to *Tabulatura Joannis*, 43.

⁸ The arrow on the right shows Secondary's second way of writing miniscule e. See figure 3.1 for the first one.

My observations of all occurrences of Secondary's writing (table 3.2) show that he favors this corrected layout for syncopation across the beat and that his layout is always clearer than Primary's. In another instance of collaboration shown in figure 3.3, Primary has copied a clausula that is found in two other versets by Secondary entered earlier. Secondary has ended the verset at the G chord between the boxes.

Figure 3.3. Detail from the Manuscript Showing a Second Ending by Primary Scribe. Digital image courtesy of The Scientific Library of the Polish Academy of Learning and Sciences, Krakow, and modified by the author.



⁹ Secondary sometimes uses vertical lines to show the *tactus* when the manuscript is crowded. Another use of lines is an annotation by Secondary to his own work in the third mass cycle on fol. 141r; it shows syncopation in the alto voice against regular semi-breve subdivisions in the discant, tenor, and bass. Here diagonal lines, a bar line, and the text *sincopa* call attention to a rising, syncopated sequence with a layout similar to that found on 69v. This annotation was previously incorrectly transcribed as *principia* by John White (see *Tablature of Keyboard Music*, no. 6, vol. 1, p. 46), but Elżbieta Witkowska-Zaremba and Marcin Szelest confirmed that the correct transliteration of the Latin is *sincopa*.

Then Primary has added a second ending comprising seven vertical columns, equivalent to 4 measures (the final column equals a whole note). Figure 3.4 shows the relationship between this second ending (top system) to similar endings of previous versets. The second ending in *Qui propter nos homines* is a transposition from F to G of mm. 23b–27 of *Qui sedes ad dexteram* from the *Gloria* of this mass (middle system).

Figure 3.4. Comparison of Second Ending from *Qui propter nos* to mm. 23b–27 of *Qui sedes* & mm. 32b–35 of *Domine Deus*. All three excerpts are essentially the same clausula.



In turn, this ending in F is a slight variation on mm. 32b–35 of the *Domine Deus* (bottom system), also from the *Gloria*—and both of these *Gloria* versets are in Secondary's handwriting. Measures 25–26 in *Qui sedes ad dexteram* are a longer version of m. 34 of the *Domine Deus* with an extra alternation between chords. In all three excerpts, the fragment in question begins with a cadential ornament which can substitute for the trill in m. 29, b. 3–4

of *Qui propter nos* (see box 1 in figure 3.3). Therefore, it appears that Primary has added a clausula (a short phrase serving a cadential purpose) on the fifth system of 70r to create a second, longer ending. However, the reason for this different ending is unclear. The key and voicing of the finalis are identical, and extra 3.5 measures in the second ending is not much longer than the original. This ending does, however, unify the *Gloria* and *Credo*, and this unity may have been Primary's intended purpose. In any case, its addition here exemplifies how the same clausula can function in multiple organ versets. The collaborative interactions suggest that both Primary and Secondary were skilled colleagues who learned from one another, with Secondary likely being the senior colleague because his script is similar to that in older tablatures (see sec. 4.4).

3.3. Physical Evidence from the Manuscript and the Scribes' Relationship

The layout of individual versets of the masses *de Domina* and *Officium Solemne* holds several clues to the scribes' relationship. There is, however, uncertainty regarding the original folio order. Pawel Gancarczyk concluded that overall the folios were assembled in "an arbitrary order when the manuscript was bound" and that establishing the original order of the manuscript as a whole would require additional repertoire and geographical studies. ¹¹

Nevertheless, past attempts to reestablish the order have been partially successful for about one quarter of the manuscript—a section that contains some liturgical works as well as part of the *Fundamentum*. Brzezińska observes that fols. 80–83r and 107v–111v group together

¹⁰ This mass is the only instance in which the same clausula is recycled. Of all the closing clausulae in the three organ mass cycles, only a few loosely correspond to those provided in the didactic exercises and none are concordances.

¹¹ Gancarczyk, "Uwagi Kodykologiczne," 57. His conclusion applies to fascicles I–V (fols. 1–48 and XIII–XXIX (fols. 112–260).

compositions for the liturgical seasons of Easter, Advent, and Christmas, suggesting that liturgical year may have determined the original order. ¹² Gancarczyk, building upon Brzezińska's work, observes that fascicles IX–XI (fol. 80–103), which are comprised of the older paper (type B, manufactured in 1512), function as one unit and that fascicle XII (fol. 104–111) is older than the others and may have been originally placed before IX. He proposes the following order of fascicles: VI, VII, VIII, XII, IX, X, and XI which equals fol. 49–79, 104–111, then 80–103. He concludes that the collected works in these sections, which comprise liturgical works and a large section of *fundamenta* (didactic exercises), were made prior to the manuscript's binding and existed independently. ¹³ Fascicles I–III form another orderly section which contains the treatise $Ad \dots choralem$ (folios 1r–14v), preludes, the first mass cycle *Missa per octavas*, and Mass Propers for Corpus Christi.

The didactic components of TJL, to which the aforementioned treatise and fundamenta belong, are readily identified and generally exhibit a consistent order within themselves. Although didactic exercises are scattered throughout the manuscript, Witkowska-Zaremba found that the sections containing them represent the oldest layer and do not have missing folios. She also noted that the text in the treatise Ad... choralem refers to the Fundamentum (implying a whole set and not as multiple exercises which would be termed fundamenta), ¹⁴ indicating that the exercises existed as a collective whole before the treatise. The largest continuous portion of fundamenta spans fols. 49r–79v, comprising fascicles VI, VII, and VIII; the headings throughout this section, some in Old Gothic block

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¹² Brzezińska, Repertuar polskich tabulatur, 37n121.

¹³ Gancarczyk, "Uwagi Kodykologiczne," 53–57.

¹⁴ Witkowska-Zaremba introduction to Tabulatura Joannis, 29–31.

script, suggest a planned layout. Gancarczyk noticed that the paper in this section was trimmed,¹⁵ most likely during a rebinding. I observed two sets of holes along the binding, suggesting that this portion of the manuscript had been restrung through new holes.¹⁶ The location of these new holes is the same, with occasional differences of a few millimeters, as the hole placement in other fascicles, including newer sections of the manuscript.

These findings regarding the main *fundamenta* section are significant because the second mass cycle, *de Domina*, is found in fascicle VII in the middle of the largest continuous portion of *fundamenta* (fols. 49r–79v). Its placement here suggests that its mass items existed independently before the manuscript was compiled and raises a question about the role of the scribes' collaboration in the origin of this cycle. As seen in table 3.4, the mass cycle *de Domina* is not written consecutively on the recto and verso sides of the folios. Two gaps separate the mass into three groups—1) *Kyrie*, 2) *Gloria* & *Credo*, and 3) *Sanctus* & *Agnus Dei*—all beginning on the top of a verso side which minimizes page turns. Extra compositions not part of the Mass Ordinary are found in the gaps between mass items, probably entered after the mass cycle *de Domina* was assembled. The *Kyrie* is immediately preceded by *Preambulum in G per B* (a prelude on fol. 62r) and two versets for *Gaudeamus omnes*, which is an *Introit* from the Mass Proper, in the hand of Secondary.

¹⁵ Gancarczyk, "Uwagi Kodykologiczne," 46.

¹⁶ The strings are from a rebinding given their clean, good condition. Many folios, including those in fascicles VI–VII, have been strengthened with a narrow strip of a Japanese paper along the centerfold. Although it is difficult to examine the binding of the manuscript in its current form, the strings appear to be restrung through the existing holes in fascicles, with the exception of this section, fols. 49–79. Folios containing *fundamenta* are also found in other portions of the manuscript and, for the most part, appear to be restrung through their original holes.

¹⁷ Gancarczyk considers all of these inserted compositions later additions made between 1540–1548, but he did not state whether or not the folios containing the organ mass existed independently before fascicle VII was made. This is fascicle is one of two octanions (an 8+8 page configuration on either side of the seam) and the typical configuration is four or five folios per fascicle ("Uwagi Kodykologiczne," 48, 54–55).

Table 3.4. Contents and Layout of Fascicle VII, Including [Missa] de Domina. Titles match the orthography in the manuscript.

	Title	Folio and System	Scribe	Purpose
Part of the Fundamentum	Sets of fundamenta: Reliqui descensus, Descensus per secundas ad octavam, Ascensus per secundas ad octavam, Unisoni sequuntur, Unisoni in superioribus clavibus	57r–60r	Primary	Pedagogical
Mass Proper: Introit	Gaudeamus Omnes 1539	60v–61r	Primary	Introit
	Gloria patri	61v	Primary	Introit
	Preambulu[m] In G p[er] B	62r	Secondary	Before mass
	Anno Domini 1539 in die S. Leonardi / Gaudeamus omnes	62v–63v, SIII	Secondary	Introit
	b) Gloria patri	63v, SIV–64r	Secondary	Introit
Ь	a) Kirie Primum de d[omi]na	64v, SI–SIV.2	Both	Mass
GROUP 1	b) Secundum Kyrie	64v, SIV.3–65r, SII.4	Primary	Mass
зRС 1	c) Criste	65r, SII.4–65v, SI.5	Primary	Mass
9	d) Kirie Ultimum	65v, SII–SIV	Primary	Mass
	Domine no[ster], s[e]c[un]d[u]m actus [nostros] noli nos iudicare — pedal[ite]r	65v, SV–66r (piece continues on 92v)	Primary	Motet*
GROUP 2	a) Et In Terra Pax [sic]	66v–67r, SV	Secondary	Mass
	b) D[omi]ne deus agnus dei filius patr[is]	67v–68r, SIII.3	Secondary	Mass
	Conclusio sup[er] H [i.e. B]	68r, SIV–V	Primary	Pedagogical
	c) Qui sedes ad dextera[m] Patris	68v–69r, SII.5	Secondary	Mass
	a) Patrem p[er] octavas N. C. 1540	69r, SIV–69v, SIII	Primary	Mass
	b) Qui Propt[er] nos homines	69v, SIV–70r, SV	Both	Mass
	Surrexit d[omi]n[u]s, valete luctus	70v–71r, SII	Primary	Motet*
	Sluschna yesth rzecz 1548 [Sluszna jest rzecz = It is only right]	71r, SIII–SV	Primary	Polish composition*
GROUP 3	a) Sanctus per octa[vas]	71v, SI–SIII	Secondary	Mass
	b) Sanctus Terciu[m]	71v, SIV–72r, SV	Secondary	Mass
	c) Agnus dei [sic]	72v	Secondary	Mass

* Classification by John R. White.

Their layout on consecutive pages suggests that prelude, *Introit*, and *Kyrie* (fol. 62r–65v) might have been their own pre-existing unit. The prelude is in the same key as the *Introit* and represents a common sixteenth-century practice of improvising a brief prelude to set the pitch for the choir to begin the *Introit*, the first sung component of the mass. ¹⁸ *Gaudeamus omnes* is the designated *Introit* for several feasts celebrating Mary, the mother of Jesus (Marian feasts): the Visitation of the Blessed Virgin Mary on July 2nd (BVM), the Vigil of the Assumption of the BVM on the evening of August 14th, the Presentation of the BVM on November 21st, and the Immaculate Conception on December 8th. ¹⁹ The additional *Gaudeamus omnes* in the hand of Primary could have been added later or been a pre-existing part of this section. Its inclusion provides an extra option for a frequently used *Introit* because, although both versets begin similarly, they diverge into different settings of the same *cantus firmus*.

The evidence strongly suggests that Primary and Secondary worked together to assemble complete mass cycles, perhaps even from mass items that originally existed independently. Fascicle VII contains the greatest amount of alternation between the two scribes, and its layout strongly suggests that they worked together to assemble *de Domina*. As previously discussed in chapter 2, this is a Marian mass; in this fascicle, it is paired with a Marian *Introit*. The multiple occurrences of alternating handwriting (see table 3.4) suggest

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¹⁸ This Prelude is the only one inscribed by Secondary. It is longer than most of the other preludes and was likely meant to complement the elaborate liturgy used for Marian feasts like the Annunciation.

¹⁹ Jerzy Pikulik, *Polskie gradualy średniowieczne* [Polish graduals from the Middle Ages] (Warszawa: Uniwersytetu Kardynała Stefana Wyszyńskiego, 2001), 180, 272, 311, 383. MF: Folio 142v in *Graduale de sanctis*, vol. 2 of the Olbracht gradual, shows this *Introit* for the day of Assumption, not the vigil. This chant is also the *Introit* for feasts of virgin martyred saints (St. Agatha, St. Dorthea), but it is unlikely that [Missa] de Domina was used for these saints' feasts. Dates are taken from Douglas Bush, "Organ music in the 15th-Century German Liturgy: A Reconstruction," *The Organ Yearbook* 20 (1989); he compiled a liturgical calendar year from fifteenth-and sixteenth-century German sources.

that the scribes shared the workload by both contributing versets, then reviewed and annotated each other's work before producing a final collection.

Although there is no information on the identity of the Secondary scribe, a general time frame for the collaboration can be established from dates found on the two *Introit* items *Gaudeamus omnes*. Primary notes the date 1539 on fol. 60v, and Secondary provides the colophon *Anno D[o]m[ini] 1539 in die S. Leonardi* at top of folio 62v. This is the only date in TJL written by Secondary. Although White interpreted this colophon as a rubric for the feast day, these dates probably indicate when these versets were inscribed.²⁰ Most likely Secondary inscribed these versets on November 6th—the feast day of St. Leonard—because Jerzy Pikulik's survey of Mass Proper chants in dozens of Polish liturgical books lists *Gaudeamus omnes* only for Marian feasts and virgin martyrs and never for male saints.²¹ Moreover, the *Graduale de sanctis*, vol. 2 of the Olbracht gradual, lists *Os insti* as the *Introit* for *Leonardi Confessoris* on fol. 161r.²²

These dates establish that Primary and Secondary collaborated before the manuscript was bound in 1540. Two of the didactic portions contain dates: The title page of the treatise Ad... choralem contains the inscription Anno domini 1540 xviii February, a little less that 4 months after Gaudeamus omnes; the second treatise Ad faciendam correcturam has the colophon

²⁰ White, "The Tablature," 148. White transcribes the title as *anno domini 1539 in die S Leonardi Gaudeamus omnes* and adds the note "*Introit* with the *Gloria patri* for St. Leonard." However, in the manuscript, the title *Gaudeamus omnes* is written on the left side of the first system and is visually separated from the date inscription.

²¹ Pikulik, *Polskie gradualy*, ch. 6 *Proprium de sanctis*, 176–389. MF: Celebration of saints' days varied according to region, and the organ was used only for the region's most important saints' feasts. It is doubtful that the organ was used for the feast of St. Leonard because he is not one of the patron saints of Poland. An argument for date of inscription is that monastic scribes commonly marked dates by the feast day rather than calendar date (see n. 23 below).

²² Taduesz Miazga, *Graduał Jana Olbrachta: Studium muzykologiczne* [The Jan of Olbracht Graduals: A Musicological Study] (Graz: Akademische Druk u. Verlangsanstalt, 1980), 117.

1540 *Sabbato, dominica Misericordia* in the hand of Primary.²³ It is possible that assembling and binding the entire manuscript in 1540 was a three-person collaboration among Primary, Secondary, and Quaternary/Student. However, Secondary's handwriting is not seen in either of these treatises.

The close dating between these portions of the manuscript may indicate that the scribes had pedagogical reasons to compile liturgical works before the manuscript was bound. The location of the *Introits* and *de Domina*, which are bookended by *fundamenta*, suggests that in addition to functioning as mass repertoire, they were intended to supplement the didactic portions of the manuscript. The first and third mass cycles may also have had the same dual functions. The third mass cycle may also have been a collaboration, but, in this instance, Secondary notated the first ten versets and Primary completed the mass cycle with the last three. The first mass cycle is entirely in Secondary's handwriting and appears heavily used, suggesting that he may have owned and used it before collaborating with Primary on TJL.²⁴ Each one of these masses serves a different liturgical function. Their inclusion in TJL provides organ parts for the three most frequently needed masses: 1) *Missa per octavas* (fol. 21v–27v) for the octave (eight days after the most solemn feast days), 2) *Missa de domina* for Marian feasts and important female saints' days, and 3) *Missa Officium Solleme* for solemn feasts such as Easter, Christmas, and Corpus Christi. Each one of the mass cycles in TJL can be paired with Mass Proper versets also found within the manuscript, for example *Missa*

²³ Witkowska-Zaremba has determined that this date is April 17, 1540. Below Primary's colophon is *Sabbato post festum in Mayo sancti Staislai anno domini* 1547 in the hand of Quaternary. This date is Saturday, May 14th, 1547. (*Tabulatura Joannis de Lublin*, 207). Quaternary's colophon does not negate the possibility of his collaboration with Primary and Secondary in 1540 because his handwriting is strongly represented in *Ad... choralem*.

²⁴ The folios containing this mass have been trimmed, in one case cutting off the notes of the final chord on fol. 22r. Also, the dirty outside margins of these folios resemble the residue from page turns.

Officium Solleme with the Introit Cibavit eos for the Feast of Corpus Christi on fol. 84v. Secondary was involved in three liturgical compositions not for the Mass Ordinary (Items 2, 4, and 5 in table 3.4). He and Primary may have decided to compile a complete collection of organ music for the liturgical year, but, for reasons unknown, Secondary was unable to continue contributing, and Primary added to the collection in the years after the manuscript was bound (1540–1547).²⁵

The evidence indicates that two musicians inscribed the three organ mass cycles. Analysis of the handwriting on and layout of the folios suggests that the two scribes collaborated together to assemble the second mass cycles, and possibly the third as well. Their reasons for doing so are most likely a combination of practical (job requirements for an organist) and pedagogical (a teaching tool that expands upon the treatise and *fundamenta*). The argument for the pedagogical function of the three mass cycles is further strengthened by their comparison to the compositional methods presented in the treatise Ad... choralem in TJL, the topic of chapter 4.

²⁵ A survey of the contents for liturgical organ music other than Mass Ordinary versets shows only a few gaps in the liturgical year. Thus, TJL could be used by an organist to fulfil their job requirements and also as a teaching tool for students.

CHAPTER IV

PEDAGOGY AND MUSICAL TRANSMISSION

This chapter investigates the relationship between the organ masses and the didactic sections in TJL. Using these sections to analyze and interpret the organ masses provides new perspectives on pedagogy and musical transmission in sixteenth-century Poland. I will provide some background context for these didactic sections and give a complete description of the contents of the treatise Ad...choralem. Then I will compare the organ masses to the treatise to show their pedagogical function. A discussion of connections with other Polish organ tablatures and an analysis of repertoire concordances provides new information on musical transmission. This chapter will show that the organ masses have both practical and pedagogical functions; this dual purpose was likely the scribes' intent as they planned and assembled the collection.

4.1. The Didactic Sections in TJL

The didactic sections in TJL belong to a category of writings collectively known as ars organisandi or ars organica.¹ Such treatises typically contain instruction on one or more of the following topics: 1) playing the organ, i.e. explanations of fingering, notation of organ

¹ Witkowska-Zaremba discusses these and similar terms in "Ars Organisandi around 1430 and Its Terminology" in Quellen und Studien zur Musiktheorie des Mittelalters, III., ed. Michael Bernhard, Veröffentlichungen der Musikhistorischen Kommission, no. 15 (Munich: Bayerische Akademie der Wissenschaften, 2001) 367-423. Additional alternate names for Ars organisandi are ars tangendi and modus organisandi, taken from titles of organ-playing treatises from the fifteenth century. The various terms can cause confusion because, prior to this century, terms such as organica generally refer to the voice, including the early polyphonic practice of organum. The dual usage for both vocal and instrumental contexts increases over time, gradually applying more and more to instrumental practice and the organ. However, the difference can be discerned from context, and the treatises discussed by Witkowska-Zaremba clearly pertain to the organ.

tablature, ornamentation, and tuning, often including sets of exercises (fundamenta); 2) intabulating (arranging) a vocal or instrumental composition for the organ; and 3) composing (or improvising) instrumental counterpoint. Ars organisandi can be supplemented with sample compositions, such as those seen in the Fundamentum by Hans Buchner. The practice of providing sets of exercises for the organist is found in sources from the early fifteenth century onward, one of the most significant being the Lochamer Liederbuch-Fundamentum organisandi (1452). The Fundamentum in the second half—attributed to Conrad Paumann, a well-known blind organist and teacher whose works were preserved by his students—methodically organizes the exercises above different tenor patterns, from unison repetition to melodic motion by step, third, and larger intervals. The purpose of the exercises is to train the organist in setting the chant at the organ. The melodic intervals in the exercises are models that can be applied to the same intervals in the chants.

The didactic portions of TJL, located in separate sections throughout the manuscript, comprise the treatise on temperament titled *Ad faciendum correcturam*, the *Fundamentum*, and *Ad... choralem* (the compositional treatise). *Ad faciendam correcturam* provides the church organist, who was typically expected to perform routine maintenance on the organ, with instructions on correcting temperament by ear.² The *Fundamentum*, older than the other sections (see sec. 3.3 in ch. 3), provides tables containing harmonizations in four-voice counterpoint that can be applied to any cantus firmus. These examples present pairs of harmonies for all melodic intervals from the unison through the sixth, as well as clausulae

² Its prose is somewhat ambiguous in places and multiple realizations of its instructions are possible. Although the temperament certainly affects the sound of the organ masses and likely influences harmonization choices, a thorough discussion is outside the scope of this study. See also Witkowska-Zaremba, introduction to *Tabulatura Joannis de Lublin*, 42–3.

(short phrases serving a cadential function) that can be used for internal and final cadences. Like the earlier, simpler *Fundamentum organisandi* by Paumann, the exercises are methodically organized, essentially providing a taxonomy of musical figures. They can be played as exercises to train the body and mind for improvisation or can be a reference table for written composition. Thus, Witkowska-Zaremba considers the didactic portions of TJL to be a continuation of the *ars organisandi* tradition of the fifteenth century.³

The treatise Ad... choralem addresses the most important skill needed for the liturgy: setting the chant in an organ verset. This concept can apply to both improvisation and composition, which were much more closely related skills in the sixteenth century than today. As this chapter will demonstrate, the organ masses exemplify the style and procedures from the Ad... choralem, thus a brief overview is needed.

4.2. Description of the Treatise Ad faciendum cantum choralem

This treatise instructs the organist on how to set a chant into a four-voice verset for the organ using six principles; table A-5 in app. A summarizes the contents and lists corresponding portions of the text and musical examples. The first principle (*primum*

³ Elżbieta Witkowska-Zaremba, "Kilka uwag na temat traktatu organowego z Tabulatury Jana z Lublina (1540): W stulecie edycji Ad faciendum cantum choralem." [Several observations on the organ treatise from the Jan of Lublin Tablature: On the centenary of the edition of Ad faciendum Cantum Choralem], Muzyka 57, no. 4 (2012): 101. "Autor traktatu z tabulatury Jana z Lublina odnosił jednak termin fundamentum nie tyle do regulopracowania cantus planus, ile raczej do zbioru gotowych wzorów organista powinien mieć pod ręką. Stąd niektóre z przykładów zamieszczonych w jego traktacie opatrzone zostały uwagą 'caetera ex fundmento' (reszta z fundamentum). Autor kontynuował zatem piętnastowieczną tradycję fundamentum jako swego rodzaju 'szkoły' sztuki gry organowej, zawierającej zarówno przykładowe rozwiązania określonych problemów z zakresu techniki kompozytorskiej, jak i kompletne utwory muzyczne." [The author of the treatise from the tablature of Johannes of Lublin referred, however, to the term fundamentum not so much as to the rules for working out a cantus planus, but rather to the collection of examples that the organist should have at hand. Therefore, some of the examples found in his treatise are annotated with the comment 'the rest from the Fundamentum'. The author continued the 15th-century tradition of Fundamentum of the school of the practical art of organ playing, containing different exercises working out problems in the technique of composition as well as complete musical works.]

necessarium) focuses on the entrance of a chant melody, providing four different methods: 1) simultaneous introduction of all four voices, as well as 2) imitation at the octave (see fig. 4.5), 3) fifth (see fig. 4.3a), and 4) diatesseron (fourth). The borrowed chant, used as a cantus firmus, may be placed in the discant, tenor, or bass; there are no instructions on setting the chant in the alto.⁴ The treatise's thirty-five examples, based on chants for the Mass Ordinary, Proper, and hymns, thoroughly illustrate application of the four methods to each location of the cantus firmus (see table A-5 in app. A), which is always stated in cantus planus. After providing these entrances, the scribe advises the organist-reader to "take the rest from the Fundamentum." The first rule in the treatise Ad... choralem closes with very brief advice on playing bicinia (two-part counterpoint) and a list of dissonances by interval. As seen in table A-5 in app. A, this is by far the largest section.

The second rule presents several principles for maintaining good voice leading and the correct pulse (*tactus*).⁶ First, the scribe provides examples of errors to avoid such as awkward leaps, cross relations, and combining B-flat with F-sharp. The emphasis is on voice leading. This discussion is followed by a passage on rhythm cautioning the reader to

⁴ This is not surprising because the organs of this time did not have the resources or tonal design needed to solo out a cantus firmus in the alto voice, which would be essential given the texture.

⁵ Cetera ex fundamento. Johannes of Lublin, "Tabvlatvra Ioannis de Lyvblyn Canonic <ORVM> Regvlarivm de Crasnyk 1540," MS 1716 fol. 3r, The Scientific Library of the Polish Academy of Learning and Sciences, Krakow; Witkowska-Zaremba, *Tabulatura Joannis de Lublin*, 62–63, 122. MF: The term *Fundamentum* in this context is functioning as a catalog of examples that the student can directly import into a verset or use for reference. See also n. 3 above.

⁶ Tactus is difficult to translate into our modern conception of rhythm, beats, and measures because the term is used in different ways, often by the same author, in treatises from the Middle Ages and Renaissance. For an explanation of the multiple meanings within TJL, see Elżbieta Witkowska-Zaremba, "The Concept of tactus in the Organ Treatise from Tabulatura Joannis de Lublyn (1540)," in Musik de Mittelalters und der Renaissance: Festschrift Klaus-Jürgen Sachs zum 80 Geburtstag, ed. Christoph Flamm, (Hildescheim, Zürich, and New York: Georg Olms Verlag, 2010), 405–414. On p. 410 she states that tactus has a metrical or rhythmic meaning in the second rule. Because the cantus planus sets the chant in the long, equal note values, these pitches also dictate the metrical pulse.

subdivide the *tactus* correctly. Organists at the time typically elaborated a melody in the discant through diminutions (filling in the time between *tacti* with short note values). Its accompanying example on fol. 10r comprises multiple measures in which the pulse has been distorted through incorrect subdivision. The second rule ends with a brief review of mensural note values.

White's quotation from the passage on subdivision of *tactus* reflects a general bias in favor of an idiomatic keyboard style (e.g. the style of Cavazzoni's organ masses) and has led to the unfortunate stereotype that the compositional style in TJL lacks imagination.

One's disappointment that much of this music displays no highly idiomatic 'keyboard style' but rather a 'severe' contrapuntal treatment close to the vocal polyphony of the tabulator's period is somewhat ameliorated by Johannes' own judgement regarding the proper style of liturgical organ playing. In fact, he rather chastises us for expecting anything different.⁷

He continues with a quote from the treatise text (sentence 102 in the blockquote below) and a transcription of the example on fol. 10r. However, White quotes this sentence out of context and presents an odd transcription of the example. The quotation in context states:

[101] One should also pay attention that one does not introduce too many or too few notes into one measure, but only so many as each measure requires. [102] Since it often happens that organists add shorter notes in playing, especially to the discant voice, or they diminish notes, and wanting to please listeners with their skill, they offend art with such tricks, gaining however the applause of those who, like asses trying the lyre, find greater pleasure in chaff

⁷ White, "Original Compositions," 90. White refers to Johannes of Lublin as the author of the treatise. Although scholars concur that Johannes is most likely the Primary scribe, it is not known if he is the author of all anonymous works in the manuscript, nor if the treatise was copied from another source.

than grain.⁸ [103] But, passing this, moving on to examples, here one sees where one has placed too many or too few notes.⁹

White's omission of sentences 101 and 103 changes the context and gives the impression that the scribe is against the use of diminutions. The scribe is actually admonishing the amateur who focuses on flashy scalar runs at the expense of the *tactus*. White's inaccurate transcription of the example on fol. 10r (no. 39, see n. 9) further distorts the quotation—it is correctly transcribed in Witkowska-Zaremba's edition seen in fig. 4.1 below.

Figure 4.1. Example 39 from *Ad faciendum cantum choralem* in Its Correct Transcription. Source: Witkowska-Zaremba, *Tabulatura Joannis de Lublin*, 93.



⁸ The last part of sentence 102, beginning with word "gaining" is an annotation at the bottom of the folio meant to be inserted into the text. This is an example of the collaboration between Primary and Quaternary scribes in the treatise, briefly mentioned in ch. 3. Quaternary's handwriting is used for the main text, and Primary inserted a footnote symbol corresponding to his annotation. The musical example is also in Primary's handwriting.

⁹ Witkowska-Zaremba, Tabulatura Joannis de Lublin, 92–3. The musical example, included in facsimile and transcription, is unnumbered in the original; this is the editor's numbering system. Likewise 101, 102, and 103 correspond to the editor's sentence numbering in the treatise. The transcription of the Latin is as follows: [101] Attendat etiam, ne plus vel minus de notis ad unum tactum ponat, nisi tantum, quantum unusquisque tactus postulat. [102] Nam multi sunt tales, qui resolute superfula, et praesertim super discantum, in tangendo addunt vel minuunt de notis, volentes velocitate sua auribus hominum placer Artem talibus cursibus offendendo, ac tamen asinis ad liram placentes, qui plus paleis delectantur quam tritico. [103] Sed his obmissis ad exempla accendendo, ubi plus vel minus de notis positum sit, hic patet.

White ignored the bar lines provided by the scribe (which were included to show the *tactus*), places it in triple meter,¹⁰ and fails to convey, as the scribe intended to show, that some of the *tacti* contain too many or too few notes. In its correct form, the distortion of the meter is easily discernible. The melodic figures that appear in this example are actually quite common in the mass ordinaries, and there they do not disrupt the *tactus* or pulse. Furthermore, these figures appear in a single voice and rarely as parallel thirds in two adjacent voices as notated by the scribe.

From this evidence we can infer that sub-par organists improvised at the expense of the pulse and resorted to prattling on in parallel thirds in a *bicinia* texture, both being rookie mistakes in improvisation. Because a *cantus planus* setting of the chant melody automatically creates a regular rhythmic pulse, such errors would have disrupted this pulse leading to a distorted cantus firmus. Recalling that all the examples in the first rule and all the mass ordinaries use *cantus planus* to set the chant melody, correctly maintaining the *tactus* was an essential skill. Although strict maintenance of *cantus planus* has been perceived as a conservative style imitating vocal polyphony, this style is quite difficult to do in four voices.¹¹ The conservative stereotype applied to the liturgical music in TJL obscures the scribes' significant achievement which will be discussed further in this chapter.

¹⁰ White, "Original Compositions," 91. The rhythmic conversion in this transcription is a semi-breve to a quarter note, a departure from White's usual practice. He typically converts the semi-breve to a half note; here the conversion distorts the *tactus*. Furthermore, White omits the rests in the tenor and bass—which the scribe uses to show the semi-breve value—and places most of the alto voice on the lower staff, thereby giving the impression that this is a duet between discant and tenor.

¹¹ Strict *cantus planus* style is frequently used in extant organ masses in two- or three-part polyphony. The shift to four voices occurs in the period 1500–1550. Similarly textured extant organ masses in four voices, such as those by Cavazzoni, frequently abandon the *cantus planus* texture in favor of an idiomatic keyboard style after the imitative opening introduces the cantus firmus.

The third rule addresses common harmonization mistakes in instrumental counterpoint. Many of the examples comprise multiple measures presenting the error in context. First the scribe addresses mistakes in bicinia, forbidding elevenths and fourths with an accompanying example where errors are marked with an "x." The scribe then advises the organist to employ thirds, sixths, tenths, and twelfths, and to avoid consecutive fifths, fourths, and octaves. Examples of proper parallel intervals (thirds, sixths, and tenths) are provided. Second, the scribe addresses the proper use of the parallel fourth, advising its use in fauxbourdon (parallel intervals of a 3rd and 6th above the bass) in a three-voice texture. The three examples in this rule show how to shift between four-voice counterpoint and fauxbourdon. The third subsection addresses the mistake of parallel fifths and octaves—the scribe advises the organist to either introduce a rest to offset the parallels or choose another harmony. Apparently parallel fifths and octaves were as much a pitfall for the sixteenthcentury student as they are today. Examples 46-47 resemble those found in a section on four-voice part writing from a modern-day theory textbook. The fourth and fifth subsections show improper voice crossings. Examples 48–51 concern errors and their correct solutions in cadences in four-voice counterpoint, and 52-54 concern errors resulting in fourths between the bass and tenor.

The fourth rule is an exhortation to vary harmony and texture when melodic intervals repeat in the chant. The scribe states, "Because the variety of measures in playing—in particular the variety of ornaments or variation—gives human ears much pleasure." 12

¹² Witkowska-Zaremba, *Tabulatura Joannis de Lublin*, 108-09. Sentence 148 reads: *Nam varietas tactuum in tangendo et praesertim diversorum colorum aut mutationem multum auribus hominum praebet oblectamenti*. The scribe gives a further comparison to a painter employing a variety of colors.

Thus, variation in harmony is seen as equally essential to that in ornamentation. Throughout this section examples of errors and corresponding corrections are presented consecutively.

The remaining rules do not have associated examples. The fifth rule is concerned with dividing the chant into phrases and aligning internal cadences in accordance with the text. The melodic phrases must align grammatically with their accompanying text—for example, phrases cannot separate a noun and its modifying adjective. Building upon this grammatical principle, the scribe provides the following instructions for setting a cantus firmus that migrates among voices: The chant is divided into three phrases, according to the grammar, with a cadence matching the end of each phrase; for example, if the phrase in the cantus firmus ends on F, the cadence should be in F. Immediately after the cadence one voice rests for several *tempora* (equivalent to one or two measures);¹³ this omitted voice will state the chant in the next phrase. The reader is advised to insert an internal clausula from the *Fundamentum* or introduce a two- or three-part passage, examples of which were given in the discussion of *fauxbourdon* in the third rule (Ex. 44–45). The inserted passage serves as an interlude linking the phrases; after the interlude the cantus firmus re-enters in the temporarily-omitted voice. The scribe's directions place the chant in the discant first, then tenor, then bass.

The sixth rule is brief and concerns the use of rests, dotted notes, and syncopations in counterpoint. Here the scribe restates the advice to use rests to avoid parallels and awkward leaps. In lieu of examples the reader is told, "... when you know how to recognize

¹³ This term suggests several semi-breves. The unknown author of the treatise uses different nomenclature for mensural notation and a *tempora* likely corresponds to the modern half note according to the typical transcription ratio. Witkowska-Zaremba discusses this nomenclature and provides a conversion chart (introduction to *Tabulatura Joannis de Lublin*, 51)

mistakes and the kinds of mistakes made, one should correct them by voice leading in those places where they occur."¹⁴

The treatise is also notable for what is omitted. It assumes the organist-reader has a working knowledge of the music fundamentals necessary for the liturgical organist. Unlike other sources of *ars organisandi*, there are no fingering charts, explanation of notation, instruction in basic counterpoint, remarks on organ building or registrations, or instructions on arranging or intabulation (*ars transferendi*). Yet the intended audience was not the most advanced student. On fol. 10r, the scribe concludes the second rule, "There are other time signatures which occur in mensural music; they are not the main topic of this treatise, since, even if they are necessary for organists, they are, however, only used by singers and by the most skillful masters of musical art." Therefore, this is a treatise for the intermediate musician, and teaches through the examples in the treatise and the *fundamentum*.

TJL is most often compared with the Fundamentum by Hans Buchner—both contain treatises with examples and fundamenta, and both supplement their instruction with additional compositions—but their differences far outweigh their similarities. Although these fundamenta are similarly organized by voice placement (discantus, tenor, bassus) and melodic intervals in the cantus firmus (unisoni ascensus, unisoni descensus), those in the Buchner source are in three voices while those in TJL are exclusively in four—some examples in Ad... choralem show fauxbourdon in three voices but these are not part of the fundamenta.

Furthermore, the Buchner source contains many of the ars organisandi elements missing from

¹⁴ Witkowska-Zaremba, Tabulatura Joannis de Lublin, 111.

¹⁵ The absence of intabulation instructions strongly suggests that the chant-based liturgical works in TJL are organ compositions resulting from improvisation, and not arrangements of vocal music.

¹⁶ Witkowska-Zaremba, *Tabulatura Joannis de Lublin*, 92–3. This is line 106 and appears on fol. 10v.

TJL: fundamentals of music (notation, rhythm, pitch, fingering, etc.) and intabulation techniques (relationship of organ tablature notation to mensural notation).

The topics within the principles for setting a cantus firmus also differ between sources. Thomas Warburton summarizes the contents of this section in the Buchner sources as follows: 1) Definition of intervals, 2) Definition of consonances, 3) Two rules for the use of consonances, and 4) Two voices against a cantus firmus, note-against-note. The third rule in TJL is the most similar to part of this list, but most of its examples are longer passages than Buchner's and provide the surrounding musical context. Ad... choralem presumes knowledge of the principles presented in Buchner and extends them further to four-voice counterpoint and more advanced techniques (for example, constructing imitative entrances at the beginning of versets in rule one and the relationship between text and structure in rule five). Witkowska-Zaremba concludes that the treatise in TJL is distinctly different from its counterpart in the Buchner source and also lacks a parallel to the texts found in the ars organisandi treatises of the late-fifteenth and early-sixteenth century. Therefore, Ad... choralem and the Fundamentum in TJL represent a significant achievement in organ pedagogy because they teach advanced techniques presented in a codified system accessible to the intermediate organist.

¹⁷ Thomas Warburton, "Fridolin Sicher's Tablature and Hans Buchner's Method of Composition" in *Res Musicae: Essays in Honor of James W. Pruett*, ed. Paul R. Laird and Craig H. Russell (Detroit Monographs in Musicology/Studies in Music, no. 33. Warren, MI: Harmonie Park Press, 2001), 116–17.

¹⁸ Witkowska-Zaremba, "Kilka uwag," 101. "Należy w tym miejscu zaznaczyć, że *Ad faciendum cantus choralem* nie wykazuje żadnego pokrewieństwa z tekstem Buchnera, nie znajduje też konkordancji z żadnym ze znanych dziś tekstów z zakresu *ars organizandi* (jedynym cytowanym autorem jest, jak wiadomo, Franchinus Gaffurius)" [It should be noted here that *Ad faciendum cantus choralem* does not show kinship to Buchner's text, nor are there concordances with any of the known *ars organisandi* texts of this time (the only cited author is, as already known, Franchinus Gaffurius)].

4.3. The Organ Masses as a Pedagogical Device

All the organ mass versets (for the Mass Ordinary, Proper, and Office) exemplify the principles in the treatise *Ad... choralem.*¹⁹ This has been previously observed by multiple scholars, but they did not conduct a comprehensive comparison. I compared each organ mass verset to the treatise, determined related traits (such as the location of its cantus firmus), categorized its entrance, and evaluated divergences in compositional techniques. Table A.2 in appendix A lists the traits that will be discussed in the section below for all 89 versets. The tables within this section are based on analysis of 80 distinct versets out of the total 89 (see sec. 2.2 in ch.2). Duplicates are not included in the statistics listed below because they have the same data points.

Collectively the organ masses in TJL have a consistent style and reflect a single-minded pursuit to master the procedure of setting a cantus firmus in a four-voice polyphonic texture, frequently with imitative entrances. Without exception, all the organ masses are in four voices and set the complete chant melody in *cantus planus*. The chant can be in one of three possible voices (discant, tenor, or bass) or migrate among all three. Often there are interludes between phrases of the chant. When the chant note is a melodic unison, the harmony changes. Ornaments, especially at cadences, are common. Dotted rhythms are employed often to vary the texture, but Lombardic rhythms (a short-long pattern) are not found. The pedal was likely used for many of the versets, ²⁰ and can be used to solo out the tenor or bass when they have the cantus firmus. These masses, therefore, exemplify the

¹⁹ Analysis of the Proper (Introits and Sequences) and Office (hymns) versets is outside the scope of this study but my cursory review of them suggests that further study would be fruitful.

²⁰ Terms like *pedaliter* are found in TJL; multiple organ mass versets are much easier to play with pedals.

resulting improvised composition after the organist has followed the scribe's advice to finish the verset using the *Fundamentum*."²¹

Table 4.1. Location of Cantus Firmus (c.f.) in Organ Versets.

	Mass Cycles		Independent items		All Organ Masses
Location	no. of Versets		no. of Versets		
c.f. in discant	10	28%	11	25%	26%
c.f. in tenor	8	22%	16	36%	30%
c.f. in bass	12	33%	15	34%	34%
c.f. migrates	6	17%	2	5%	10%
Total	36		44		80 versets*

^{*}Nine duplicate versets are omitted; see discussion in sec. 2.2 in ch. 2 and table A.2 in appendix A for their identification.

The organ mass versets thoroughly illustrate the first rule of Ad... choralem (see table A.5 in appendix A for a summary of its concepts). The three possible locations shown in the first rule are represented, with a significant number of migrating cantus firmi as well (see table 4.1). Assessment of the mass cycles alone shows a departure from the traditional placement of the cantus firmus in the tenor and discant. The versets favor a placement in the bass more often than then tenor, 33% to 22% respectively. This emphasis marks a new direction for organ composition in comparison to other sources of sixteenth-century organ masses. Some of the TJL versets with the cantus firmus in the bass are quite striking, such

²¹ See n. 3 and n. 5 above.

²² Three-part organ masses are most often written for discant, counter tenor, and tenor; a few versets in Attaingnant's collection that have a bass line still place the cantus firmus in the tenor. In these versets, the cantus firmus is placed high in the tenor's range (A3 to G4), and the discant is not high enough to allow for a countertenor between the two voices. There are also other versets in the Attaingnant collection in which the counter tenor momentarily crosses below the tenor. The four-part masses by Cavazzoni overwhelmingly favor placement in the discant, although there are a few that have the cantus firmus in the bass. A cursory survey of Buchner's organ masses shows that, although they do vary placement of the cantus among the three possible voices, the bass is not favored to the same degree as in TJL.

as the *Agnus Dei* from the third mass cycle. The cantus firmus is in breves in the bass; in performance it is appropriate to play this with a prominent reed stop in the pedal which lends gravitas to the verset.

The versets that have a migrating cantus firmus follow the procedure described in the treatise in the fifth rule. In the organ masses of TJL, migration occurs in the *Credo* (the *Patrem* and *Qui propter nos*) and *Et in terra pax* (the first verset for the *Gloria*);²³ the remaining *Gloria* versets do not contain a migrating cantus firmus. The versets employing migration exhibit methodical and careful planning.²⁴ In all four settings of *Et in terra pax*, the cantus firmus migrates from the bass to the discant over the course of three phrases, each separated by clausulae with a two- or three-voice texture. Some of these interludes use *fauxbourdon*, mentioned in the third rule and shown in Examples 46–47. However, the treatise only describes migration from the discant down to the bass, a technique seen only in *Qui propter nos* from *de Domina*. The treatise does not mention the reverse pattern seen in the *Et in terra pax* versets, but a rising migration could be a form of text painting. The bass voice typically contains the chant melody corresponding to "and peace to his people on earth. We praise You. We bless You." It migrates to the tenor or, in one case, directly to the discant for "we

²³ See versets 1.05, 2.05, 2.08, 2.09, 3.05, 12.01, and 13.01 in table A.2 in app. A. One *Agnus Dei* (1.11) also has a migrating cantus firmus but does not exhibit the same procedure; the migration to the discant could be considered fore-imitation because the bass later re-enters with the cantus firmus.

²⁴ Examination of Buchner's four *Et in terra pax* versets, whose chants correspond to the same phrases of text as in the Polish tradition (see the *Gloria* discussion in sec. 2.6 in ch. 2), did not find the same consistent procedure found in TJL. In the three-voice *Et in terra pax paschale* (#31a in Schmidt, ed., *Hans Buchner: Sämtliche Orgelwerke*; see fig. 2.3 in ch. 2) the cantus firmus begins in the discant and abruptly migrates mid-phrase to the tenor in m. 5 without an interlude. *Et in terra pax hominibus, angelicum* (#19a, a four-voice verset) and *Et in terra pax* (#17a, a three-voice verset) have the cantus firmus in the tenor throughout. Another setting from the Pentecost mass (#8a) is an imaginative trio-texture with imitation of the cantus firmus throughout. My cursory survey of masses by Cavazzoni and Attaingnant also did not reveal any resemblances to the migration procedure described and demonstrated in TJL; their versets are generally too short for the migration technique due to their *alternatim* patterns.

adore You," and always has the text "we glorify You" in the discant, often with some embellishment. Thus, the migration of the cantus firmus reflects the praise of God moving from earth up to heaven. One of the *Patrem* versets, which is entered into TJL twice on fol. 38v and 202v, also has upward migration, but starting in the tenor to the discant.

In addition to varied placement of the cantus firmus, the beginnings of the versets correspond to the four different methods for introducing it from the first rule; table 4.2 categorizes the versets by their type of entrance and includes the two additional categories—bicinium and irregular. The latter denotes unclassifiable entrances that differ from the first five in col. 1, table 4.2. Nineteen versets exemplify simultaneous introduction of all four voices, the first and simplest type, with fifteen of these being standard examples—in complete agreement with the principles of the treatise.

Table 4.2. Comparison of Verset Entrance Types to the Principles in the Treatise Ad faciendum cantum choralem.

Type of Entrance	Standard	Modified	Atypical	Total
Simultaneous (all voices)	15		4	19
Imitation at 4th	1	8		9
Imitation at 5th	5	22	2	29
Imitation at 8ve	10		4	14
Bicinium (2-voice duet)		3	3	6
Irregular			3	3
Total	31	33	16	80

Note: Standard = complete correspondence to the principles

Modified = change of an expected 4th or 5th to an octave

Atypical = a significant alteration beyond a modified interval

These entrances are fairly straightforward to construct; the most notable feature is that the alto typically starts at a fifth (or occasionally a third) above the bass. The imitative entrances at the octave, fifth, and fourth are the largest and most diverse category, comprising fifty-two versets. These follow the format of fore-imitation—the entrance of each voice sounds the first several notes of the chant with the last voice stating the complete chant phrase. These imitative entrances can occur at the interval of the octave, fifth, and fourth. Within the subset of the versets using imitation at octave, ten follow the procedure of the treatise as shown in fig. 4.5; the four atypical examples do not employ imitation in all four voices. The majority of the entrances at the fourth or fifth are modified, usually resulting in three voices at the octave and one at the fourth or fifth (figs. 4.2 and 4.3a).

Figure 4.2. Beginning of *Kyrie Ultimum* from [Missa] de Domina, fol. 65v. Had the bass entered on a C, in octaves with the alto and the counterpoint reworked, the result would be a standard example of imitation at the fifth. The bass note G changes this entrance into imitation at the fourth. Compare this excerpt to figure 4.3a below for the correct technique.



The large number of modified imitative entrances in the versets is surprising and raises the question as to why the scribes did not use the examples from the treatise, which exhibit correctly realized counterpoint, to generate versets for the collection.

²⁵ The instructions for voicing found on fol. 2r result in the following interval relationships: discant and bass in octaves (or double octaves) only, tenor in unison with or an octave above the bass, and the alto a fifth or third above the tenor. Thus, third of the chord, when there is a triad, can only be placed in the alto.

Figure 4.3. Comparison of Imitative Entrances Based upon *Kyrie cunctipotens genitor Deus* (MEL018). *Top* (4.3a), example 18 from *Ad... choralem* demonstrating imitative entrance at the fifth; *bottom* (4.3b), *Kyrie Tercium* on fol. 22r showing a different version of the entrance. Figure 4.3a reproduced from Witkowska-Zaremba, *Tabulatura Joannis de Lublin*, 71.



Thirteen of the chants used in Examples 1–35 in the treatise are also used in eighteen different versets in TJL, but John White found that none of the musical examples are duplicated in the full-length compositions. ²⁶ In most cases, the corresponding full-length verset uses a different type of entrance, thus providing even more models for the student.

²⁶ White, "Original Compositions," 89. Most of the chants found in the examples are hymns and Mass Propers, but four are Mass Ordinary chants, all of which have full-length counterparts in TJL.

However, sometimes the entrance in the treatise's example is superior to its counterpart, for instance example 18 on fol. 5r versus *Kyrie Tercium* on fol. 22r (fig. 4.3). The example on fol. 5r (4.3a) begins with D3 in the bass voice and illustrates a standard example of imitation at the fifth, with an ornamented cantus firmus entering in the discant on A4 in m. 6. The entrance in *Kyrie Tercium* on fol. 22r (4.3b) matches 4.3a for the first 5.5 measures except that it is transposed an octave higher. The bass enters with the cantus firmus on D3 in m. 8, resulting in a modified imitative entrance that contradicts the instructions in the treatise—the bass, tenor and discant are in octaves and only the alto has the fifth (A4).²⁷ Had the example on fol. 5r been consulted before *Kyrie Tercium* was created, it could have been used as the opening of the verset. The modified entrance on fol. 22r provides additional evidence to support the hypothesis that some organ versets, particularly those in the three complete mass cycles, may have existed independently before the treatise and were gathered to include in the collection.²⁸ The other *Kyrie* item on the same chant, found on 87v–88r and written by Primary, uses simultaneous entrances for the same portion of the chant and cannot be compared to the excerpts in fig. 4.3.

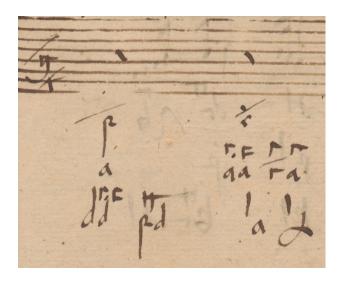
Apart from the entrances, the organ mass versets reflect additional principles in the treatise, rules two through six. Although there are occasional errors in the versets, they are not the awkward leaps and incorrect subdivision of the cantus firmus described in the

²⁷ Witkowska-Zaremba, *Tabulatura Joannis de Lublin*, 79. Sentence 62 from the treatise states: Regula generalis super bassam incipiendam per diapente est talis, quod semper discantus primum incipiat, postea altus, deinde tenor, ultimo bassa. [The general rule for a bass voice entering at a fifth is that always the discant voice begins first, then the alto voice, thereafter the tenor voice, and at the end the bass voice.] The treatise also specifies interval relationships that pair the discant with tenor and alto with bass in octaves; the bass and tenor are either a fifth or fourth apart, depending upon the desired type of entrance. *Kyrie Tercium* puts the bass in octaves with the tenor and discant. See also section 4.5.2 for an example in TKD that deviates from the treatise.

²⁸ Folio 22r is within a fascicle that likely dates to approximately the same time period as *Ad... choralem*, and bears the same watermark, dated to 1522. Chapter 3, section 3.3 discusses the hypothesis of prior existence in more detail and provides evidence on the basis of paleography and fascicle layout.

second rule. Short passages of *fauxbourdon* are common in the versets; some of these have a migrating cantus firmus discussed above. Numerous versets exemplify the author's advice in the fourth rule to vary the texture and harmony if the cantus firmus contains a repeated pattern of pitches, for example f-g-f-g. Often a series of equal subdivisions in the elaboration of the counterpoint shows signs of being altered later into a dotted rhythm (see fig. 4.4).

Figure 4.4. Detail from fol. 25r in TJL Showing Alteration to a Dotted Rhythm. The first d in the bass line is vertically misaligned with the tenor and alto, suggesting a later addition with the dotted rhythm. The tenor (middle row of letters) on the right. Digital image courtesy of The Scientific Library of the Polish Academy of Learning and Sciences, Krakow.



Multiple versets contain a cantus firmus divided into three phrases (rule 5) with connecting interludes of two or three voices—some of which have the migrating cantus firmus discussed earlier. Some of the *Sanctus Tercium* versets are in this category although their cantus firmi is divided into two phrases for syntactical reasons—the text *Sanctus*, *Dominus Deus Sabaoth* cannot be divided into three phrases without becoming grammatically incorrect. Another common feature is a rest in one voice to avoid parallel fifths (the sixth rule).

The organ masses as a whole also exhibit other traits seen in the musical examples but not explicitly discussed such as migrating scalar passages, imitation of motives, the cantus firmus in canon, and doubling the cantus firmus at the octave. Figure 4.5, example 17 on fol. 5r in Ad... choralem, shows a scale from the alto voice passing to the discant and continuing upward in m. 3. This type of passing scale is seen in numerous versets.

Figure 4.5. Example 17 from *Ad faciendum cantum choralem* Showing an Ascending Scale Passing from Alto to Discant. Reproduced from Witkowska-Zaremba, *Tabulatura Joannis de Lublin*, 71.



Other typical traits are illustrated by fig. 4.6, an excerpt from the *Et in Terra pax de s[an]cta maria sabatinis diebus* [sic] on fol. 224v that also has a migrating cantus firmus. These traits include short imitation of motives among the accompanying voices—for example, in m. 30 the alto imitates the ascending tetrachord of the discant; in mm. 36–37, the dotted rhythmic figure in the alto is repeated a half measure later in the tenor. Dotted rhythms are used to offset the alto and tenor to create independent lines, as seen in m. 19, or to create syncopation at the semi-breve level as seen in m. 42. This type of syncopation calls to mind

Secondary's annotation correcting the notational layout at the end of the *Patrem per octavas* on fol. 69r (see fig. 3.3).

Figure 4.6. Excerpt from Et in Terra pax de s[an]cta maria sabatinis diebus, fols. 224v–225r.



A lovely example of the cantus firmus in canon at the octave between the discant and bass is seen in mm. 22–26 (throughout the text *laudamus te, benedicimus te*); the bass is one measure behind the embellished discant and lacks the pitch d in m. 25 to avoid parallel fifths. The imitation continues in mm. 29–33, but this time the discant is one measure behind the bass, and its embellishments obscure the chant in m. 31. While these examples of canon are rare in TJL, the techniques of doubling the cantus firmus in the discant at the octave and adding diminution to avoid parallel octaves are frequently employed. Although these traits can be found in non-Polish organ music, their presence here bolsters the connection between the organ masses and examples in the treatise.

The stylistic unity evident in the organ masses suggests that the scribes intentionally chose versets that corresponded to their procedure for setting the chant in order to effectively teach these techniques. The dual function of liturgical repertoire—to serve immediate job-related needs and to teach improvisation and composition—is not unique to TJL, but the high degree of correspondence between the organ masses and the treatise does not have a counterpart in other extant contemporaneous sources. ²⁹ Collections of organ music prior to 1600, especially those in manuscript form, are generally somewhat haphazard in containing a variety of sacred and secular compositions, and even those within a single category, e.g. versets on a fixed cantus firmus, may have different textures and techniques. Thus, the TJL organ masses enhance the significant achievement of the didactic portions:

²⁹ For comparison, the procedures and examples in Buchner's *Fundamentum* are all in three-voice texture, but many compositions of four or five voices are included after the written treatise. Additionally, the compositional techniques are much more varied and do not always keep the cantus firmus throughout the verset. In some versets it is impossible to trace the chant melody several measures after its entrance.

Fundamentum to finish a verset; 71 of these are directly related to the procedures described in the first rule, the longest section in the treatise.³⁰ Clearly the scribes intended to disseminate the style in TJL beyond Kraśnik, and TJL's connections to other Polish organ tablatures will prove useful in demonstrating this intent.

4.4. Connections between TJL and Other Polish Organ Tablatures

The three other Polish organ tablatures from the period 1500–1550 (see sec. 2.1, ch. 2) have connections to TJL regarding script, musical style, and repertoire. These connections further support the existence of the distinct liturgical practice and compositional style and establish a geographical region for this Polish organ music. Two of the sources share the same general location, and the third, from L'viv, indicates that this style was broadly transmitted.³¹ The Augustinian fragment and TKD both originate from Krakow (see n. 33 below), and past research has established several links between Krakow and TJL.³²

³⁰ Although *bicinia* entrances are not explicitly demonstrated, the technique is addressed under several rules. There are six versets using this technique; thus, there are 77 versets in total that are generally related to the treatise.

³¹ Widespread distribution of music was already established a century earlier. Reinhard Strohm established the existence of an active network encompassing all of Europe from the-early fifteenth century onward, using the similarities among sources throughout Europe as evidence. He concludes that long-distance communications greatly increased during the *ars antiqua* and *ars nova* periods in "European Politics and the Distribution of Music in the Early Fifteenth Century," *Early Music History* 1 (1981): 306. See also Miroslaw Perz, "The Lvov Fragments. A Source for Works by Dufay, Josquin, Petrus de Domarto, and Petrus de Grudencz in 15th-Century Poland," *Tijdschrift van de Vereniging voor Nederlandse Muziekgeschiedenis* 36 (1986): 40. The Lvov [in Polish Łwów, now L'viv, Ukraine] Fragments (RISM PL-Pu 7022, ca. 1472-73 and 1476), which contain masses by Dufay, Josquin, and others, illustrate the range of this network in the late-fifteenth century. The first fascicle in this manuscript reflects a connection between Italy and Lvov through Gregory of Sanok, archbishop of Lvov from 1451–1477, who had met Dufay in Bologna and Florence during his travels to Italy in the mid-1430s. The third fascicle has connections with Silesia, and, since Krakow lies on the route from Lvov to Silesia, Perz proposes that Krakow was a conduit between Lvov and the rest of Europe.

³² Elżbieta Zwolińska, "Pytania o Muzykę," 32–35. Johannes of Lublin is likely the same Jan z Lublina who graduated from the University of Krakow (Jagiellonian University) in 1508. He was also an altarist (a priest in the service of a patron who supported an altar within a church, similar to a vicar or chaplain) at St. Mary's in Krakow in the 1520s. MF: The monastery at Kraśnik, TJL's place of origin, was established ca. 1469 by the Canons Regular of the Lateran at Corpus Christi Church in Kazimierz. At that time this town, today a district in Krakow within walking distance of St. Mary's, was adjacent to Krakow and outside the city walls.

One script found in TJL, evidenced by Secondary's handwriting, is very similar to the scripts used in two earlier sources (see fig. 4.7): the Augustinian fragment (before 1528)³³ and the organ tablature at the Warsaw Public Library (PL-Wp akc. 3141, henceforth referred to as "Tablature 3141"); ³⁴ the latter contains handwriting by two different scribes in the same style of script. ³⁵ Furthermore, Scribe B's handwriting in Tablature 3141 is strikingly similar to the one in the Augustinian fragment. These similarities among the three tablatures establish a canonical script (consistent handwritten lettering) distinct from other scripts in TJL. The shared script suggests that Secondary may have had a connection to the scribes who wrote the earlier Polish organ tablatures. Perhaps he was their student, but, lacking additional information, the finding of a canonical script remains an interesting but inconclusive connection. Although TKD uses a different canonical script similar to that in German sources (note the leftward slant of the d's stem, the f-sharp, and minim rest in the bottom image in fig. 4.7), it contains many concordances in repertoire which will be discussed further below.

³³ Barbara Frydrychowicz, "Augustiański fragment organowy i jego środowisko macierzyste" [The Augustinian Organ Fragment and Its Origin], *Muzyka* 16, no. 2 (1971): 3–4. This fragment, written on thin boards of birch wood later used for bookbinding, was discovered in 1968 during the conservation of a gradual from 1528 that originated from The Order of St Augustine (OSA) monastery in Kazimierz. The full article discusses the contents of the fragment: liturgical music for the mass, including versets for the sequence *Congaudent angelorum* that are also found in TJL, and versets for *Kyrie cunctipotens genitor Deus*. This *Kyrie* follows the same textual *alternatim* patterns found in TJL (see section 2.5 in ch. 2).

³⁴ Barbara Frydrychowicz, "Nowy polski zabytek muzyki organowej z pierwszej polowy XVI wieku" [A new Polish artifact of organ music from the first half of the 16th century], *Muzyka* 11, no. 2 (1966): 68–83. Tablature 3141 originates from a Dominican monastery in Łwów, now L'viv, Ukraine. Like the Augustinian fragment, it was found in the bookbinding of an early-sixteenth century book. Frydrychowicz dates the book to 1533–36 and the organ tablature fragments to (ca. 1520–30). The manuscript comprises 19 loose folios previously trimmed; its compositions are incomplete. Frydrychowicz identified some of these: two different preludes, liturgical organ music comprising a motet intabulation of *Et valde mane* by Heinrich Finck (the original likely composed ca. 1510), three measures of a *Kyrie fons bonitatis* (MEL048) verset, and some fragments that she proposed were dances or song settings due to the repeated fermatas (p. 77). However, I observed that these fragments are quite similar to clausulae in the *Fundamentum* in TJL, suggesting that these may also be some type of didactic exercise.

³⁵ Frydrychowicz, "Nowy Zabytek," 70.

Figure 4.7. Comparison of Scripts from Different Polish Tablatures. *Clockwise from top left*: Detail of Secondary's handwriting on fol. 23v in TJL, detail showing similar script in the Augustinian fragment, and contrasting script in TKD. Digital image (*top left*) courtesy of The Scientific Library of the Polish Academy of Learning and Sciences, Krakow, and modified by the author. Digital images (*top right and bottom*) reproduced from Polona, the Digital Library of The National Library of Poland and modified by the author.



The music contained in the three sources have many characteristic compositional features that are also found in TJL. All contain the various ornament symbols also found in TJL but not in other European sources. Comparison of these signs to written-out ornaments in a similar context shows that some are executed differently but have the same function. All three tablatures use a similar four-voice counterpoint.³⁶ The organ compositions in TKD generally reflect the systematic approach to setting the chant that is seen in Ad... choralem,

³⁶ TKD and TJL contain some three-voice compositions, but these are typically secular song arrangements or dances. Frydrychowicz observed that some folios in Tablature 3141 contain three voices in "Nowy Zabytek" (69–70), but I observed that these folios are trimmed quite closely along the second row of letters below the staff (the tenor voice), suggesting that the bass line may have been cut off.

whereas the two earlier sources look somewhat like prototypes in comparison with the stylized examples of entrances (no. 1–35) from Ad... choralem.³⁷ This is significant because it suggests that the compositional style in TJL was still evolving; perhaps the scribes developed the systematic approach in TJL to codify a newly emerging contrapuntal practice at the organ. The use of pedal is specified in three sources: TJL, TKD, and the Augustinian fragment.³⁸ Unlike TJL, which uses bar lines only for clarification of crowded or misaligned notation, the three other Polish organ tablatures all have bar lines in a grid-like layout that is seen in German sources (see n. 2, ch. 1).

4.5. Repertoire Concordances among Polish Organ Tablatures

The repertoire concordances establish connections among all four Polish organ tablatures. A motet intabulation of *Et valde mane* by Heinrich Finck from Tablature 3141 is found twice in TKD, and one version of this intabulation in TKD also contains some duplicated measures. ³⁹ Both TJL and the Augustinian fragment contain versets for the sequence *congaudent angelorum*; Barbara Frydrychowicz found segments of musical material common to both sources from the middle of three of these versets. ⁴⁰ There are multiple concordances between TKD and TJL, some of which involve additional internal concordances (i.e. duplicates) within TJL. As mentioned in sec. 2.2 in ch. 2, internal

³⁷ Neither of these tablature fragments have been published in transcription. Frydrychowicz transcribed excerpts in "Augustiański Fragment Organowy" and "Nowy Zabytek." She expanded on these earlier transcriptions in Repertuar polskich tabulatur, published under the name Brzezińska.

³⁸ Frydrychowicz, "Nowy Zabytek," 74. The author observed that Tablature 3141 specifies the use of pedal with red notation on folios 6, 7, and 14v–18—a notational practice also seen in Paumann's *Fundamentum organisandi* and the Kleber tablature (1520–24).

³⁹ Brzezińska, Repertuar polskich tabulatur, 31–32, 36, & 69.

⁴⁰ Frydrychowicz, "Augustiański Fragment Organowy," 24–26. For example, mm. 9–14 on fol. 135r from the fifth verset in TJL are nearly identical to their counterpart in the Augustinian fragment, with only minor differences in ornamentation.

external concordances within TJL can make it difficult to count unique versets; yet both internal and external concordances suggest that these versets were circulating among different musicians. Scholars have suggested that the original versets could have been anything from a sketch of the structural counterpoint to a finished composition complete with ornamentation. The concordances, some of which involve multiple versets, can be classified as one of three types: a completely identical copy (at pitch or a transposition with no differences other than ornamentation), an adapted copy (transpositions altered beyond ornamentation or two versions that differ in elaboration of the counterpoint), and shared excerpts (distinct versets with duplicated musical excerpts typically at the beginning of a verset), suggesting that these excerpts circulated as models for improvisation and composition. While preparing my critical edition of the mass ordinaries, I identified additional shared excerpts among versets, marked with an asterisk in table 4.3. In contrast to simply showing circulation of versets among musicians, the distinct versets with shared material illustrate the creative process, thus providing information on musical transmission and pedagogy.

4.5.1. Concordances of opening material

Sanctus Solleme, an independent mass item comprising three versets in D on fols. 154v–155v, shares excerpts with the Sanctus from [Missa] Officium Solemne and is nearly 100% identical to a copy in TKD, also in D, suggesting that this Sanctus was shared by organists. However, the version in Officium Solemne is in G and was written by Secondary. Analysis shows that two pairs of versets from these mass items, Sanctus [Primum] and Sanctus Tercium, were generated from the same opening material that served as models for the organist-composer—each pair uses a different model (see H.1.b and H.2.b in table 4.3).

Table 4.3. Concordances of Shared Musical Excerpts.

Item	Common title	Chant	Verset	Verset codes†	Location: description
A.1*	Kyrie cunctipotens genitor Deus	MEL018	Kyrie	1.01 & 4.01	Opening: 1.01, mm. 1–10 and 4.01, mm. 1–11.
A.3			Christe	1.03 & 4.03	Opening: first 3 mm. Internal: 1.03, mm. 5–9 & 11–14 and 4.03, mm. 5–10 & 12–15.
A.4*			Ultimum Kyrie	1.04 & 4.04	Opening: mm. 1–5a. Internal: 1.04, mm. 17–20 and 4.04, mm. 16–19.
B.3.c	Kyrie paschale	MEL039	Christe	6.03 & 5.03	Internal excerpts discussed by Kos
B.4.c			Ultimum Kyrie	5.04 & 6.04	Internal excerpts discussed by Kos
C.1.b*	Kyrie fons bonitatis/virginatis	MEL048	Kyrie	3.01& 8.01/TKD p. 354	Internal: 3.01, mm. 9b–12a and 8.01/TKD, mm. 15–17.
C.2.b*			Kyrie Tercium	3.02 & 8.02/TKD p. 355	Internal: see section 4.5.3 for discussion.
Е	Gloria (solemne)	BOS024	Et in terra pax	3.05 & TKD p. 359	Shared opening discussed by Brzezińska.
F	Gloria (per octavas)	BOS056	Et in terra pax	1.05 & TKD p. 314	Shared opening observed by White and Insko. See section 4.5.2 for discussion.
G.2.b*	Credo (solemne)	MZG33B	Qui propter nos	3.09 & 3.02	Opening: first 3 mm. un-transposed despite different keys in versets.
H.1.b*	Sanctus Solemne	THA185	Sanctus	3.10 & 15.01/TKD p. 344	Opening: first 9 mm., see section 4.5.1 for discussion.
H.2.b*	Sanctus Solemne	THA185	Sanctus Tercium	3.11 & 15.02/TKD p. 345	Opening: first 5 mm., see section 4.5.1 for discussion.

Sources: Data adapted from Kos, "Kyrie paschale' in Polish Organ Tablatures," 13–16; Brzezińska, Repertuar polskich tabulatur, 75; White, "The Tablature of Johannes of Lublin" and "Original Compositions;" Insko, "The Cracow Tablature."

Note: This table is an abbreviated form of my complete list of concordances which includes identical and adapted copies. Thus, the item numbering sometimes skips letters and numbers.

The *Sanctus [Primum]* versets begin with a nine-measure opening segment with the cantus firmus in the bass. Figure 4.8 shows my transcription of the first *Sanctus* versets in a

^{*} indicates new discoveries

[†] verset codes taken from table A.2 in appendix A

stacked format for comparison, with the G verset (by Secondary) on top and the version by Primary on the bottom—transposed from D to G for convenience.

Figure 4.8. Comparison of Sanctus [Primum] from Two Sanctus Solemne Items.





The version in TKD is not included because its minor differences with the version by Primary are insufficient to warrant a separate system. The beginning is unusual because it is one of the few that does not follow the procedures for entrances described in the treatise—these versets are two of the three irregular ones listed in table 4.2. As seen in figure 4.8, both versions are strikingly similar for the first nine measures. The opening three measures of the bottom version also expand the rising tetrachord in the tenor into a sequence, suggesting that Primary is intentionally altering the counterpoint here. The tetrachord appears only one time in the G verset. The two versions are essentially variations in elaborating the counterpoint; these differences account for others, such as those in the discant and tenor lines in m. 3. The two settings begin to diverge at m. 9, where a written-out ornament on

bt. 3 in Primary's version resolves to a cadence in C in m. 10, bt. 1. These measures condense a similar passage from mm. 9–11, bt. 1 in Secondary's version, which repeats the cantus firmus note in m. 10. Figure 4.8 aligns the remainder of the versets by their cantus firmi to account for the repeated note in Secondary's version in m. 10.

Hereafter, the versets slowly diverge into unique settings sharing similar counterpoint between the bass and discantus throughout. The intervals between the bass and discant, indicated by Arabic numerals, are identical in ten measures after the cadence in m. 11 of Secondary's version (equivalent to m. 10 in Primary's). Even when structural intervals differ, resulting harmonies are the same. These versions also illustrate how different clausulae can be applied to the end of similar versets.⁴¹ Despite the striking similarities between the versets, there is sufficient variety in the counterpoint to distinguish them for the listener.

In the *Tercium Sanctus* versets from both *Solemne* items, a five-measure segment generates two distinct compositions that lack the type of structural similarity seen in the *Sanctus [Primum]* versets. This segment follows the principles found in the treatise regarding imitative entrances at the octave but is not one of *Ad...choralem's* musical examples. One verset is in G (fol. 144r) and the other in D (fol. 155r); both are in the hand of the Primary Scribe. Figure 4.9 presents both versions, again in a stacked format with fol. 144r on top and the D verset transposed to G. The first five measures are nearly identical. The main point of departure comes in m. 6, bt. 1 where the cadential trill resolves differently. In Secondary's version the cadence is on the sixth degree of the mode, and the cantus firmus note is twice

⁴¹ See section 3.2 in ch. 3 (including figs. 3.3 and 3.4) for an example of the same *clausula* applied to different versets.

the usual length. This leads to a delay of the cadence that disrupts the structural counterpoint.

Figure 4.9. Comparison of Tercium Sanctus from Two Sanctus Solemne Items.





From the cadence onward, the versets are distinct, although there are some highly similar passages (e.g. mm. 6–10) due to the placement of the cantus firmus in the tenor. In figure 4.9 the version by Primary is shifted to align the cantus firmi to highlight the similarities—m. 8–9 in Secondary's version to mm. 7b-9a in Primary's. Thus, the five-

measure opening segment is a model used to generate a verset, suggesting that the many musical examples in the first rule of the treatise can also serve as models.

The two *Tercium Sanctus* versets are significant because both exemplify the fifth rule of the treatise (the relationship between text and structure) in different ways, thus allowing a comparison of techniques after m. 6. Although rule five advises the organist to divide the chant into three phrases, the text in the *Tercium Sanctus* can only be split into two phrases. Both versions break the chant in the same place, at the end of the word *Sanctus*, but end these phrases differently: the cantus firmus in Secondary's version in mm. 10–14 is extended into a melisma for the cadence on bt. 1 in m. 14, whereas in Primary's version it ends in m. 11. The interludes between phrases are different lengths as well. In fig. 4.9 the versions are aligned by their cantus firmi according to the start of the second chant phrase; Secondary's version has five extra measures, as seen on the top of p. 112. The three-voice interlude (mm. 14–19) in Secondary's version uses fore-imitation in the bass (mm. 14–16) and discant (17–19) to introduce the cantus firmus entrance in the tenor in m. 20. In contrast Primary's version (fol. 155r) introduces the second phrase in m. 14 after a two-measure clausula ends in a cadence (mm. 12–13). The internal cadence and interlude with fore-imitation are more elaborate in the first version on 144r.

These two different versions by the same scribe may be connected in some way to the collaboration between Primary and Secondary in the third mass cycle, [Missa] Officium Solemne. Secondary's handwriting is used for the entire mass through the first Sanctus verset, whereas the remaining three, Sanctus Tercium, Osanna, and Agnus Dei, are written by Primary. The Osanna versets both contain the cantus firmus in the discant but are different versets with slightly different cantus firmi in the second half. Although there is no Agnus Dei verset

Solemne to produce a complete set. This untitled verset is a transposed version of the Agnus Dei on fol. 145v. This would match the chant pairing (THA185 with SCB226) in the third mass cycle and extant liturgical books. 42 Mass items are rarely repeated in TJL, and, when they occur, usually involve transpositions. It is unclear which version of this Agnus Dei existed first. 43 Perhaps Sanctus Solemne on fols. 154v–155v existed before Officium Solemne and was adapted to complete the mass cycle. The original Agnus Dei verset may have been separated prior to the binding, and Primary recopied it on fol. 248v. Alternatively Primary, after working on this mass cycle with Secondary, may have been inspired to write/improvise another Sanctus Solemne set reusing the same compositional models and later transcribed the verset Agnus Dei from Officium Solemne to D. Nevertheless, the similarity between the Sanctus [Primum] and Sanctus Tercium versets and the Agnus Dei verset on fol. 248v may be further evidence of collaboration. At the very least, the compositional models are a means transmitting the techniques set forth in the treatise.

4.5.2. A concordance using an altered compositional model

The opening of the Et In Terra Pax [sic] on fol. 23v, from the first mass cycle per octavas, has a concordance with an outside source, TKD. Almost all the concordances between TJL and TKD comprise identical and adapted copies, but this example of a shared excerpt shows that models used to generate a verset circulated beyond the scribes of TJL. A comparison of both versions demonstrates different applications of the same model. The per

⁴² The pairings of *Sanctus* and *Agnus Dei* chant melodies, including THA185 and SCB226, are discussed in sec. 2.4 ch. 2. p. 33.

⁴³ The date 1546 is found on fol. 248r with another composition *Sancto Ergo Sacramentis*, but this could have been inscribed into the manuscript later.

octavas verset on fol. 23v, written by Secondary, is a standard example of entrances at the fifth from rule one in the treatise. However, the TKD scribe's version is somewhat different, reflecting a clumsy attempt in comparison with the Secondary's version. Figure 4.10 shows the two versets in a stacked format with Secondary's verset on top and aligns the two versions by their common material on the first system and cantus firmus entrance on the second. This alignment shows that the TKD scribe has placed the second entrance in the tenor (m. 2) and the alto enters simultaneously with the bass without fore-imitation.

These changes are likely errors because they differ from the instructions given in Ad... choralem.⁴⁴ As the alignment in fig. 4.10 shows, Secondary's version follows the order of voices from the treatise, resulting in 2 ½ additional measures (mm. 4b–6) that contain the tenor's entrance on D3. The errors in the TKD scribe's version lead to the early entrance of the bass in m. 4b—this measure contains too many tacti in the original and was transcribed in 3/2 by Wyatt Insko.⁴⁵ The bass enters an octave below the discant on D3 in m. 4b, and, since the bass has the cantus firmus, the entire verset is offset by a fourth in comparison to Secondary's version.⁴⁶ Setting the cantus firmus on D3 may have been intentional, as this matches the chant's pitch in PL-Kk 45 (a Polish gradual), but it also necessitates octave displacement in mm. 4b–5 and 7 to fit the cantus firmus within the organ's compass (F2 is the lowest key). As a result of the irregularities in the opening material in TKD and this source's later date, Secondary's version presumably contains the original model.

⁴⁴ See sec. 4.3 and n. 27 above.

⁴⁵ Wyatt Marion Insko, "The Cracow Tablature," Vol. 2, 37.

⁴⁶ The bass's entrance is an octave and fourth below the entrances of the discant and tenor, respectively. It is an incorrect pairing as the octaves should be arranged as discant—tenor and alto—bass according to Ad... choralem. This placement of the bass changes the opening from entrance at the fifth (seen in Secondary's version) to a fourth, the diatesseron. The procedure for entrances at the diatesseron specifies the order of voices as discant, alto, tenor, and lastly bass. Thus, the omitted alto is a problem in entrance at the diatesseron.

Figure 4.10. Comparison of Et in terra pax Versets from TJL and TKD.



The versets show different techniques in setting the remainder of the cantus firmus. Secondary's version divides the chant into three phrases and follows the procedure for a

migrating cantus firmus. The version in TKD keeps the cantus firmus in the bass throughout without any breaks except at m. 12. This is another curious compositional decision because this measure appears to break the text corresponding to the cantus firmus in the wrong place. The entrance on E3 in m. 11a in TKD repeats the last note of the cantus firmus from the preceding phrase, but this pitch corresponds to the last syllable of the text *hominibus*. The next phrase of text, *honae voluntatis*, enters a 2nd higher—Secondary's version is correct with the B-flat2 in m. 16.⁴⁷ The TKD version also repeats the error of too many notes within a tactus (see m. 4) two more times, once at m. 23 and again at m. 35. This may represent the type of error that the treatise addressed in ex. 39, discussed earlier in this chapter (see fig. 4.1), because the first measure of this example shows three semi-breves within a tactus, which is the same type of error in mm. 4, 23, and 35 in TKD.

The different application of the model in TKD suggests that it is the work of a musician less skilled than Secondary. If mm. 1–7 from Et In Terra Pax [sic] in TJL are a compositional model, errors (placing the second entrance in the tenor, omitting 2.5 measures) could have been made as the model circulated among musicians, or the entire verset in TKD may have been miscopied. Alternatively, perhaps the scribe in TKD attempted to alter an existing model to a different key and, instead of transposing the entire opening, decided to use the tenor's entrance (m. 6 in the model from TJL) to state the cantus firmus. This last explanation is the most likely because the bass is not included in the fore-imitation.

⁴⁷ Another significant deviation from the cantus firmus that affects the text occurs at mm. 24b–25. It appears that the text *adoramus te, glorificamus te* is missing half the pitches for the syllables ("ra-mus te," and "glor"). The four pitches of the cantus firmus in these measures loosely correspond to this portion in the chant, but there is a strong possibility of an error here because this much deviation is unusual in comparison to other Mass Ordinary versets in TKD.

4.5.3. Concordances after verset entrances

Concordances of musical excerpts can also occur after verset entrances, providing a possible illustration of how the *fundamenta* were applied. In his study of all *Kyrie paschale* items found in early-sixteenth century Polish organ tablatures, Kos observed similarities between parts of the Christe versets on fols. 81v & 156v and parts of the Kyrie Ultimum versets on fols. 82r & 156v. (All of these are inscribed by Primary.) This shared material also extends to TKD because it contains a four-verset Kyrie paschale on pp. 44–46 that is identical to the TJL setting on fols. 155v–156v. Kos concluded that these portions originated from intabulation of a vocal mass by Heinrich Finck and were further altered by copyists and/or composers as the scores circulated. 48 Although these versets may not have originated as improvised organ compositions, the excerpts may have evolved later into an informal Fundamentum. Kos' examples involve the handwriting of the Primary and TKD scribes; I found three additional occurrences of corresponding musical excerpts in distinct versets (A.4, C.1.b, and C.2.b in table 4.3) that include Secondary's handwriting. These examples show a creative interaction between the Primary and Secondary scribes similar to that in the first Sanctus from Sanctus Solemne discussed above, with the difference that they occur towards the end of a verset. Additionally, the C group in table 4.3 involves a mass item also found as an identical copy in TKD—with minor changes in counterpoint elaboration. This example connects the two versets from Kyrie fons bonitatis from the third mass cycle (fols. 138r–140r)—one that shows

⁴⁸ Kos, "Kyrie paschale' in Polish Organ Tablatures," 36-41.

evidence of collaboration with Primary—to *Kyrie virginitatis* (fols. 39v–40v), which is renamed *Kyrie eleyzon fons bonitatis p[ri]ma N. Z.* in TKD (pp. 354–357).⁴⁹

The concordances between TJL's Kyrie fons bonitatis and Kyrie virginitatis occur in the first Kyrie and Kyrie Tercium; there are no connections between Secondary's and Primary's versions of the Christe and Ultimum Kyrie versets from these mass items. The shared musical material in the first Kyrie is brief; mm. 9b–12a on fol. 137v are similar to mm. 15–17 on fol. 39v. The shared material from *Tercium Kyrie* is a larger segment, and, because the version in TKD is not completely identical, its analysis merits some discussion. Figure 4.11 shows all three versions in a stacked format with Secondary's version (fol. 138r) on top, Primary's one in the middle, and TKD's one on the bottom. Some measures are identical, while others have differences that can be attributed to contrapuntal elaboration. (Compare mm. 18–19 in Secondary's version to mm. 21–22 in the other two.) The most significant difference is m. 20/23 (Secondary's version/Primary's & TKD). Secondary's version has leaps in the alto and tenor in m. 19, bt. 4 of the preceding measure which sets up a smooth transition over the bar line. These leaps are absent in the other two versions resulting in a rest in the tenor in m. 23, bt. 1. Although Secondary's version lacks the descending tetrachord, it has the smoothest voice leading. The version in TKD has a diminished-fourth leap between G sharp and C natural in the alto (m. 23 bt. 3-m. 24 bt. 1). Measure 23 in Primary's version is a compromise between Secondary's and TKD's counterpoint and preserves the ornament in the discant.

⁴⁹ Kyrie fons bonitatis and Kyrie virginitatis are two different tropes for the same melody MEL048, the latter used for Marian feasts. The title in TKD raises the issue of attributions to N. Z. and N. C. See n. 12, ch. 2.

Figure 4.11. Comparison of Similar Measures in Three *Tercium Kyrie* Versets from *Kyrie fons bonitatis/virginitatis*.





The approach into the shared excerpt is much smoother in Secondary's version than in the other two. The previous phrase of the cantus firmus ends in m. 16 (top system), followed by a one measure interlude that cadences on bt. 1 of m. 18. The other two versions use a three-measure interlude in three voices that uses a chant-derived imitative motive in the discant to introduce the next phrase of the cantus firmus, much like Secondary's version of *Sanctus Tercium* from *Sanctus Solemne* discussed above. However, unlike this previous example, the transition into this motive has a somewhat abrupt shift in range (mm. 19–20). The version in TKD may also have scribal errors from the copying process; m. 18 has a rest for the bass resulting in an awkward bass line in mm. 17–21. The transition out of this segment at mm. 22–23/25–26 provides an example of how clausulae were used. The version by Secondary is the most elaborate and ends in A. The other two versions use a different

clausula beginning with the chord in bt. 1 of m. 26. The TKD version ends on an A chord, but Primary's version extends this with an active bass line to end on an E.

The five-measure shared segment is small, but the awkwardness of the transition into it and the different clausulae at the end suggest that the composer of the version inscribed by Primary and the TKD scribe borrowed from another source, possibly the verset by Secondary. It appears that their versions are a less-successful attempt to apply the fore-imitation technique to an interlude, as compared with Secondary's version of *Sanctus Tercium*. This lack of success suggests that the five-measure segment may have been taken from a composition that circulated as a teaching example, thus functioning as an informal *fundamenta*.

In summary, the high degree of correspondence between the organ masses and Ad...choralem shows that the concordances discussed in section 4.5 are not accidental. The internal concordances in TJL involving one verset by Secondary and the other by Primary show circulation between two musicians within a single source, given the evidence of their collaboration (see ch. 3). It appears that the shared musical excerpts between different settings of a cantus firmus functioned in two ways: as a compositional model for the beginning to assist in generating a distinct verset (written or improvised); and as a fundamentum example to insert into the verset after its opening. The relationships among scribes in versets that have these shared excerpts lends further support to the hypothesis that Primary and Secondary collaborated. They could have worked together in Krakow, then Primary added the treatise Ad...choralem and additional compositions, such as the independent mass items, when or after the manuscript was bound. Primary's method for setting the chant in an organ verset was brought later to Kraśnik where it was probably used

to teach improvisation and composition; at the very least it provided ready-made repertoire and models for the less-skilled organist.

The organ masses supplement the didactic portions (the Fundamentum,

Ad... choralem, and Ad faciendum correcturam). These portions on their own are impressive,
and, combined with the organ masses, demonstrate a distinctive pedagogical practice in TJL.

This practice, which is rooted in the ars organisandi tradition, is a significant achievement in
organ pedagogy and music history.

CHAPTER V

CONCLUSION

The organ masses from the Tablature of Johannes of Lublin demonstrate a distinct liturgical practice of Central-European chant repertoire and Northern-tradition alternatim patterns, a collaboration between two scribes, and a coherent compositional style integrating techniques from vocal polyphony with the *Fundamentum* approach in ars organisandi treatises. Examination of these organ masses adds new information to existing knowledge of the sixteenth-century organ mass and accentuates the scribes' achievement in compiling a complete pedagogical method in TJL by combining these masses with the didactic portions Ad faciendum cantum choralem, Ad faciendam correcturam, and the Fundamentum. The organ masses, as well as the manuscript's other liturgical versets outside the scope of this study, can be considered an intentional extension of the didactic portions. Some of these organ masses, as well as several other individual compositions, contain first documented incidence of collaboration by two scribes. A detailed study of alternations in handwriting and their connection to concordances between versets provides new information on musical transmission and pedagogy. Extending this examination to include concordances found in external sources shows that the compositional style in TJL represents a larger school spanning Krakow to L'viv.

This study shows that it is necessary to revise the current narrative on the organ mass, which heavily prioritizes Italian and French practice, to account for regional differences. The findings regarding *alternatim* patterns, taken together with information from

Buchner's masses, establish a Northern tradition distinct from that found in French and Italian sources. The observations regarding chant repertoire show that the organ masses of TJL reflect the liturgical practice in Central-Europe.

The didactic portions have potential for teaching counterpoint to today's music students because they emphasize having models at hand for reference. TJL offers an alternative to the species counterpoint taught in a rules-first approach. The *Fundamentum* and treatise Ad... choralem could be adapted into teaching materials that supplement the counterpoint portion of standard music theory textbooks. The practical application of TJL also opens up possibilities for research in music theory pedagogy.

This detailed study of repertoire in TJL has borne fruit, although more work remains to be done. Additional investigation of concordances—i.e. the identical versets by multiple scribes found in different transpositions—could yield information about ornamentation and pitch centers. Expanding this study to include versets for the Mass Proper, Hymn, and Magnificat might help to clarify unresolved issues such as original folio order and the full extent of Secondary's role.

No new Polish organ tablatures have been discovered since the 1960s, but more might be found with a focused search, including music incorporated in book bindings. Non-invasive laser scanning and other technologies used in museum preservation opens up new possibilities for this search. Although manuscript fragments yield limited information, they sometimes confirm observations in more sizable manuscripts, provide additional concordances of repertoire, and show routes of transmission. Discovery of additional manuscripts with a similar canonical script to Secondary's handwriting—possibly by the

same scribes in TJL, TKD, the Augustinian fragment, and Tablature 3141—would be especially valuable for future research.

TJL is the largest source of keyboard music before 1550, containing a sizable didactic supplement and the largest collection of sixteenth-century European organ music comprised of all genres in use at this time. Its repertoire is a key to understanding the development of European keyboard music. Hopefully, this focused study will inspire other scholars to investigate other aspects of the manuscript to elucidate the early history of the organ and its music.

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APPENDIX A

TABLES

Table A.1. European Sources of Organ Masses to 1550.

RISM Sigla or Publisher	Composer	Organ Mass Cycles*	Organ Mass Items	Description (title, date, place of origin; notes.)
I-FZc-117	Anonymous	2 incomplete	1 Kyrie verset	Faenza Codex, ca. 1420 or 1430, Ferrara; now in Biblioteca Comunale, Faenza.
PL-WRu- I Q 438a	Anonymous	none	Fragment of a <i>Gloria</i> (3 versets)	Sagan Fragment, ca. 1425, Żagań (Sagan), Silesia.
A-Wn-3617	Anonymous	none	1 Kyrie magnae Deus	Early 15th century
D-B- theol.q.290		none	1 Credo 1 Sanctus	1431, Wynsem [Windsheim?]; now in the Berlin State Library, ms. of sermons with several music compositions.
D-Mbs-3725	Anonymous	1 incomplete	5 Kyrie 1 Credo 1 Sanctus	Buxheimer Orgelbuch, ca. 1455–1460.
CH-Bu- F I 8a	Hans Buchner	1 complete 3 incomplete	4 Sanctus 4 Agnus Dei	Ca. 1510, copied 1551;† copy of Zurich 284a–b with additional compositions.
CH-Zz-284b	Hans Buchner	none	1 Kyrie	Ca. 1510, copied ca. 1546–7.†
PL-Wp-3141	Anonymous	none	Fragment of a verset on <i>Kyrie fons bonitatis</i>	Ca. 1520–1530, Dominican monastery in Łwow, now L'viv, Ukraine.
PL-Wn-Mus. 2081 Cim	Anonymous	none	Fragments of four versets on Kyrie cunctipotens genitor Deus.	Before 1528, Augustinian monastery, Krakow.
GB-Lbl-roy. app. 56	Anonymous	none	1 Kyrie	Ca. 1530
I-CARcc	Jacques Brumel?	2 complete 1 incomplete	1 Christe verset 1 Credo	Ca. 1530–50 (organ masses), Castell' Arquato, Italy; complete ms. of ten fascicles without call numbers spans to the early-17 th century.

RISM Sigla or Publisher	-	Organ Mass Cycles*	Organ Mass Items	Description (title, date, place of origin; notes.)
Paris: Pierre Attaingnant, 1531	Anonymous	2 complete		Tablature pour le jeu dorgues sur le plain chant Agnus Dei (1531)
PL-Kp-1716	Anonymous	3 complete	8 Kyrie 1 Gloria 1 Credo 2 Sanctus 2 Agnus Dei	Tablature of Johannes of Lublin, ca. 1537–48, Kraśnik, Poland.
GB-Och-371	Anonymous John Redford	none	1 Kyrie 1 Agnus Dei	Ca. 1560–70 [‡]
PL-Wn-564	Anonymous	1 incomplete	2 Kyrie 1 Gloria 3 Sanctus	Tablature of the Holy Ghost Monastery, ca. 1548, Krakow; original lost, mf. 17088. 2 <i>Kyrie</i> & 1 <i>Sanctus</i> also found in TJL.
GB-Lbl-add. 29996	Philip ap Rhys	1 complete		Ca. 1548–1650; large manuscript in five sections.
Venice: before 1549	Girolamo Cavazzoni	3 complete		Intabulatura dorgano, cioe misse detto d'Urbino
Total		7 incomplete 18 complete	29 Kyrie 3 Kyrie fragments 2 Gloria 1 Gloria fragment 4 Credo 11 Sanctus 7 Agnus Dei	

Note: Not listed are the three organ mass cycles from a now-lost manuscript (ca. 1560) from the collection of Jules Labarte, Paris. See Adrien de La Fage, Essais de diphthérographie musicale (Paris, 1864), 261–271. Three additional sources of organ masses after 1550 were included for comparison of alternatim patterns in ch. 2 and table A.3, given the scant extant sources. They are: Claudio Merulo, Messe d'Intavolatura d'organo (Venice: 1568); Antonio Cabezón, Obras de mú[si]ca para tecla, arpa [y] vihuela . . . por Hernando Cabeçon (Madrid: 1578); Andrea Gabrieli, Libro quarto delle sue Tabuladure (Venice, before 1605). The second and third sources are published posthumously after the composers' deaths in 1566 and 1585, respectively; the dates of the masses are

^{*} Incomplete mass cycles comprise complete Kyrie and Gloria items that have been paired together within their source.

[†] Buchner's compositions originate ca. 1510 but are known only in later copies. See Davies

[&]quot;Resonet in Laudibus" 3n7.

[‡]The date of the anonymous *Kyrie* item is unknown, but *Agnus Dei* must have been written before 1547, the date of Redford's death.

Table A.2. Catalog of Organ Mass Versets in TJL (with chant identifications and compositional characteristics).

Group No : Mass	Item Melody ID	Title Code	Title as it appears in the manuscript	Original folio S = system no.	Location of c.f.†	Type of Entrance (no. shows interval of imitation)	Relationship to the treatise (Adchoralem)
	Kyrie MEL018	1.01	Sequit[ur] Officium Per octavas Kirie Prim[um]	021v, SI–SV	Т	simul.	textbook
	MEI	1.02	Tercium Kirie	022r, SI–SV	В	imit., 5	modified
3.5	yrie]	1.03	Criste eleyzon	022v, SI–SIV	D	simul.	atypical
octav		1.04	Ultimum Kirie	022v, SV–23r, SIV	В	imit., 5	textbook
Per	056	1.05	Et In Terra Pax	023v, SI–24r, SV	Μ	imit., 5	textbook
cium	BOS	1.06	D[omi]ne deus agnus dei	024v, SI–SV	Т	imit., 5	modified
1: [Missa] Officium Per octavas	Gloria BOS056	1.07	Qui sedes ad dextera[m] p[at]r[i]s	025r, SI–SV	D	imit., 5	modified
[Mi.		1.08	Sanctus Per Octavas	025v, SI–SIV	D	simul.	textbook
<u> </u>	Sanctus THA019 Agnus Dei SCB037	1.09	Sanctus Tercium	025v, SV–26r, SV	Т	imit., 8	atypical
	ıctus T us Dei	1.10	Ozanna In excelsis	026v, SI–27r, SI	В	imit., 5	modified
	San Agn.	1.11	Agnus dei	027r, SII–27v, SIII	M	simul.	textbook
	11	2.01	Kirie Primum de d[omi]na	064v, SI–SIV.2	В	imit., 4	modified
па	Kyrie MEL111	2.02	Secundum Kyrie	064v, SIV.3–65r, SII.4	D	imit., 5	modified
Jomi	\dot{v} M	2.03	Criste	065r, SII.5–65v, SI.5	В	imit., 5	modified
de L	Ky	2.04	Kirie Ultimum	065v, SII–SIV	D	imit., 4	modified
issa	037	2.05	Et In Terra Pax	066v, SI–67r, SV	M	imit., 4	modified
2: [Missa] de Domina	Gloria BOS037	2.06	D[omi]ne deus agnus dei filius patr[is]	067v, SI–68r, SIII.3	D	imit., 4	modified
	Glor	2.07	Qui sedes ad dextera[m] Patris	068v, SI–69r, SII.5	T	bicinium	atypical
	Credo MZG531B	2.08	Patrem p[er] octavas N. C. 1540	069r, SIV–69v, SIII	M	imit., 5	textbook
	C	2.09	Qui Propt[er] nos homines	069v, SIV–70r, SV	Μ	imit., 5	atypical

(Table A.2. continued)

(Group No.: Mass Item Melody ID	Title Code	Title as it appears in the manuscript	Original folio S = system no.	Location of c.f.†	Type of Entrance	Relationship to the treatise (Adchoralem)
9)39 .056	2.10	Sanctus per octa[vas]	071v, SI–SIII	D	simul.	textbook
2: [Missa] de	Sanctus THA039 Agnus Dei SCB056	2.11	Sanctus Terciu[m]	071v, SIV–72r, SV	В	imit., 5	modified
2: [7]	Sanctu. Agnus I	2.12	Agnus dei	072v, SI–SV	Т	imit., 4	modified
	Kyrie MEL048	3.01	Kirie Fons bonitat[is], Sequit[ur] Officium Sollemne	137v, SI–SV	Т	simul.	textbook
	M	3.02	Terciu[m] Kirie	138r, SI–138v, SII	В	imit., 5	modified
	ζyrie	3.03	Criste eleyzon	138v, SII–139r, SV	D	imit., 5	modified
me	<i>T</i>	3.04	Ultimu[m] Kirye	139v, SI–140r, SII	В	imit., 4	modified
ollen	2 42	3.05	Et In Terra	140r, SIII–141r, SIV	Μ	imit., 8	textbook
S m	Gloria BOS024	3.06	Domine deus agnus dei	141v, SI–SV	В	simul.	textbook
ficin	BC	3.07	Qui sedes ad dextera[m]	142r, SI–SV	T	imit., 5	modified
a] O	, 3B	3.08	Patrem Sollemne	142v, SI–143r, SII	В	imit., 4	modified
3: [Missa] Officium Sollemne	Credo MZG33B	3.09	Qui propt[er] nos homi[n]es¹	143r, SIII–143v, SII	D	imit., 5	modified
	185	3.10	Sanctus Solleme In G	143v, SIV–144r, SIII	В	irreg.	hybrid
	HA1 5 Dei 226	3.11	Sanctus Tercium	144r, SIV–144v, SV.2	Т	imit., 8	textbook
	Sanctus THA185 Agnus Dei SCB226	3.12	Ozana in excelsis	144v, SV.3–145r, SIV	D	imit., 5	modified
	Sanc	3.13	Agnus dei in G p[er] B²	145v, SI–146r, SIV	В	imit., 5	modified
r		4.01	Kirie p[er] octavas	087v, SIII-87v, SVI	Т	simul.	textbook
ie pe	vas .018	4.02	Tercium	087v, SVII-88r, SIII	D	simul.	atypical
4: Kyrie per	octavas MEL018	4.03	Criste	088r, SIV-VII	D	simul.	atypical
4	4	4.04	Ultimum Kirie	088v, SI-SV.6	В	imit., 5	modified

(Table A.2. continued)

Group No.: Mass Item	Melody ID	Title Code	Title as it appears in the manuscript	Original folio S = system no.	Location of c.f.†	Type of Entrance	Relationship to the treatise (Adchoralem)
5: Kyrie paschale MEL039		5.01	Kirie Paschale	081r, SVI-81v, SI	В	simul.	textbook
Syrie pasc MEL039		5.02	Kirie Tercium	081v, SII-IV	D	imit., 5	modified
Syrie MEI		5.03	Criste Eleizon	081v, SV-VII	В	imit., 5	modified
5: <i>K</i>		5.04	Kirie Ultimum	082r, SI-V.3	Т	imit., 5	atypical
		6.01	Ky[ri]e pascale N.C. ³	155v, SV–156r, SII	Т	imit., 5	modified
	6a	6.02	Untitled [Tercium Kyrie]4	156r, SIII–156v, SII.7	D	bicinium	modified
	9	6.03	Cr[ist]e	156v, SII.8–SIV	В	simul.	atypical
		6.04	Ky[rie] e[leys]on Ultimum	156v, SV–157r, SIV	Τ	imit., 8	atypical
6: Kyrie paschale MEL039	q9	6.05	Ky[rie] e[leys]on Paschale 1543³	190v, SV-191r, SII;	Т	imit., 5	modified
Kyrie pascı MEL039		6.06	S[e]c[un]d[u]m [Kyrie] 4	191r, SII.10-SV	D	bicinium	textbook
6: <i>Ky</i> M		6.07	Ky[rie] e[leys]on paschale phynk³	238r, SIII-SV	Т	imit., 5	modified
	99	6.08	S[e]c[un]d[u]m Ky[rie] e[leys]on4	238v, SI-IV	D	bicinium	textbook
		6.09	Cr[iste] e[leys]on ⁵	238v, SV–239r, SIV	В	bicinium	modified
		6.10	Ky[rie] e[leys]on ultimum6	240v, SI–SV.4	T	bicinium	modified
vrie vale	600	7.01	Kyri[e] eleyzon phynk pascale 1542	207r	D	irreg.	hybrid
7: Kyrie paschale	MELUSY	7.02	Christe Eleizon ⁵	207v, SI–SV	D	bicinium	modified
1 7	≧	7.03	Untitled [Kyrie Ultimum] 6	208r, SI–SV	Т	bicinium	modified
.52 C	ς.	8.01	Ky[rie] e[leys]on Virginitatis	039v, SI–SIV	Т	imit., 4	modified
8: Kyrie virginitatis	MELU48	8.02	Ky[rie] e[leys]on Tercium	039v, V–40r, SIII	D	imit., 5	modified
8: P	ME	8.03	Untitled [Christe eleison]	040r, SIII–40v, SIV.3	Т	bicinium	atypical
,,	'	8.04	Ky[rie] e[leys]on Ultimum	040v, SIV.4–41r, SV	В	imit., 5	modified

(Table A.2. continued)

	ie Group No.: Mass lens Item 78 Melody ID		Title Code	Title as it appears in the manuscript	Original folio S = system no.	Location of c.f.†	Type of Entrance	Relationship to the treatise (Adchoralem)
	9: Kyrie Magne Dens MEL078		9.01	Kyrie magne deus In G 187v, SIII-V; 96r, SVI-VII		Т	simul.	textbook
			10.01	Kirie eiusdem offici[um]	109r, SI.4-SII	Т	simul.	textbook
smi		10a	10.02	Terciu[m]	109r, SIII-SV.2	В	imit., 8	textbook
dyer		1(10.03	Criste eleison	109r, SV.3-SVII	Τ	imit., 8	textbook
M	32		10.04	Ultimum	109v, SI-SIII.7	В	imit., 8	atypical
10: Kvrie de S.M. adventus	MEL132		10.05	Ky[rie] e[leys]on de Sancta Maria t[em]p[or]e adventus	189v, SI-SII	Т	simul.	textbook
Kvr		10b	10.06	S[e]c[un]d[u]m [Kyrie]	189v, SIII-SV.3	В	imit., 8	textbook
10:)	1	10.07	Cr[iste] e[leys]on	189v, SV.4-190r, SII	Τ	imit., 8	textbook
			10.08	Ultimum Ky[rie] e[leys]on	190r, SIII-V	В	imit., 8	atypical
ancta			11.01	Ky[rie] e[leys]on de sancta maria	186v, SIII-IV	Т	simul.	textbook
S ap	Maria EL171		11.02	Untitled [Kyrie Tercium]	186v, SV-187r, SII	D	imit., 5	modified
vrie	Maria MEL171		11.03	Criste	187r, SIII-SV.2	Τ	simul.	textbook
11: K	11: Kyrie de Sancta Maria MEL171		11.04	Ky[rie] e[leys]on Ultimum	187r, SV.3-187v, SII.VI	В	imit., 4	textbook
Je Sancta	bbatinis us	<u></u>	12.01	Et in Terra pax de s[an]cta maria sabatinis diebus	224v, SI–225r, SV.5	М	imit., 5	modified
via	12: Gloria de Sancta Maria Sabbatinis Diebus BOS023		12.02	Domine deus Agnus dei	225v	В	imit., 8	textbook
12; Glo			12.03	Qui Tollis p[ec]c[a]ta m[un]di	225v	D	imit., 5	textbook

(Table A.2. continued)

	Group No.: Mass Item Melody ID		Title Code	Title as it appears in the manuscript	Original folio S = system no.	Location of c.f.†	Type of Entrance	Relationship to the treatise (Adchoralem)
emne	3B	13a	13.01	Patrem solemne In d^7	038v	M	imit., 8	textbook
n Sol	13.01 Patrem solemne In d' 13.02 Qui propt[er] nos 13.03 Aluid solemne patrem? 13.04 Qui propter Nos		039r	D	imit., 5	textbook		
atren	lo M	0	13.03	Aluid solemne patrem ⁷	202v	Μ	imit., 8	textbook
13: Patrem Solemne	Crea	13b	13.04	Qui propter Nos ho[mi]nes¹	203v	D	imit., 5	modified
nctus	50		14.01	Angelicum Sanctus 1546	241r, SI–SV	В	imit., 5	modified
m Sa	HA1! SCB1		14.02	Sanctus Tertium	241v, SI–SIII	Т	simul.	textbook
14: Angelicum Sanctus	Sanctus THA150 Agnus Dei SCB179		14.03	Untitled [Osanna in Excelsis]	241v, SIV–242r, SI	В	bicinium	atypical
14:	5a Agi		14.04	Agnus Prim[um]	242r, SII–SV	В	simul.	textbook
зие	5 26		15.01	Sanctus solemne	154v, SII–155r, SI	В	irreg.	hybrid
us Solen	15: Sanctus Solemne Sanctus THA185 Agnus Dei SCB226		15.02	Untitled [Sanctus Tertium]	155r, SII–SV	Т	imit., 8	textbook
ancti			15.03	Osanna [in excelsis]	155v, SI–SIV	D	imit., 8	textbook
15: 5			15.04	Untitled [Agnus Dei in D] ²	248v, SI–249r, SIV	В	imit., 5	modified

¹ 3.09 and 13.04 are duplicate versets in transposition.

² 3.13 and 15.04 are duplicate versets in transposition. Although 15.04 is untitled and separated from 15.01–15.03, it can be considered part of the Sanctus Solemne set based on the chants corresponding to the cantus firmi.

³ 6.01, 6.05, and 6.07 are duplicate versets in transposition.

⁴ 6.02, 6.06, and 6.08 are duplicate versets in transposition.

⁵ 6.09 and 7.02 are duplicate versets in transposition.

⁶ 6.10 and 7.03 are duplicate versets in transposition.

⁷ 13.01 and 13.03 are identical versets in the same key.

Table A.3. Alternatim Patterns in Sixteenth-Century Organ Masses and the Faenza Codex.

			Pol	lish	Ger.	Italian				Fr.	Eng.	Sp.	
Phrase Number	Item/mvt	Text	TĴT	TKD	Buchner	Faenza	Castell' Arquato	Cavazzoni	Merulo	Gabrieli	Attaingnant	Philip ap rhys¹	Cabezon ²
1.01	Kyrie	Kyrie eleison	Org	Org	Org	Org	Org	Org	Org	Org	Org	C, Org ³	Org
1.02	Kyrie	Kyrie eleison	С	С	С	С	С	С	С	С	С	С	С
1.03	Kyrie	Kyrie eleison	Org	Org	Org	Org	Org	Org	Org	Org, rpt	Org	Org	Org
1.04	Kyrie	Christe eleison	С	C	С	С	С	С	С	С	C ⁴	С	Org
1.05	Kyrie	Christe eleison	Org	Org	Org	Org	Org	Org	Org	Org	Org	Org	С
1.06	Kyrie	Christe eleison	С	С	С	С	С	С	С	С	С	С	Org, rpt
1.07	Kyrie	Kyrie eleison	Org	Org	Org	Org	Org	Org	Org	Org	Org	Org	Org
1.08	Kyrie	Kyrie eleison	С	С	С	С	С	С	С	С	С	С	С
1.09	Kyrie	Kyrie eleison	Org, rpt	Org, rpt	Org	Org	Org	Org, rpt ⁵	Org	Org	Org	Org	Org, rpt
2.01	Gloria ⁶	Gloria in excelsis deo	Р	P	P	P	P	Р	Р	Р	P	P	_
2.02	Gloria	Et in terra pax	Org	Org	Org	Org	Org	Org	Org	Org	Org	C, Org	_
2.03	Gloria	Lauamus te		<u> </u>	\	С	С	С	С	С	С	С	_

KEY: Org = organ verset, C = choir, P = priest or cantor, V = varies, Org, P = repeat an organ verset, Q = previous party continues, Q = previous party cont

Ger.

Italian

Fr.

Polish

KEY: Org = organ verset, C = choir, P = priest or cantor, V = varies, Org, P = previous party continues, - = no extant mass items for organ, ? = indeterminate due to missing versets or unable to account for the cantus firmus.

			Po	olish	Ger.	Italian					Fr.	Eng.	Sp.
Phrase	Number Item/mvt	Text	TJL	TKD	Buchner	Faenza	Castell' Arquato	Cavazzoni	Merulo	Gabrieli	Attaingnant	Philip ap rhys ¹	Cabezon ²
2.3	4 <i>Mar.</i> (Gl. Ad Marie gloriam		<u> </u>	_	<u> </u>	С	С	С	;	<u> </u>		<u> </u>
2.3	5 <i>Mar.</i> (Gl. Qui sedes nobis	?	<u> </u>	_	<u> </u>	Org	Org	Org	С	<u> </u>	_	
2.3	6 Mar. C	Gl. Quoniam tu solus	?	<u> </u>	_	<u> </u>	С	С	С	Org	_	_	<u> </u>
2.3	7 <i>Mar.</i> 0	Gl. Mariam sanctificans.	?	<u> </u>	<u> </u>	<u> </u>	Org	Org	Org	C	<u> </u>	_	<u> </u>
2.3	8 <i>Mar.</i> C	Gl. Tu solus Dominus	?	<u> </u>	_	<u> </u>	С	С	С	\	<u> </u>	_	
2.3	9 <i>Mar.</i> (Gl. Mariam gubernans	?	<u> </u>	_	<u> </u>	Org	Org	Org	\	_	_	
2.4	0 <i>Mar.</i> 0	Gl. Tu solus Altissimus	?	<u> </u>	_	<u> </u>	С	С	С	Org		_	_
2.4	1 Mar. C	Gl. Mariam coronans Jesu Christe	,	- -	_	_	Org	Org	Org	?	_	_	_
2.4	2 Mar. C	Gl. Cum Sancto Spiritu	5	<u> </u>	_	_	С	С	С	С	_	_	_
2.4	3 Mar. C	Gl. In gloria Dei Patris	5	<u> </u>	_	_	?	\	Org	Org	_	_	<u> </u>
2.4	4 <i>Mar.</i> (Gl. Amen	;	<u> </u>	_	_	?	Org	<u> </u>	?	_	_	_
3.0	1 Credo	Credo in unum Deum,	P	<u> </u>	P	_	P	P	P	P	P	_	_
3. ()2 Credo¹	Patrem omnipotentem, invisibilium.	. Org	—	_	_	Org	Org	Org	Org	Org, C, Org ¹²	_	- -

				Pol	lish	Ger.	Italian					Fr.	Eng.	Sp.
	Phrase Number	Item/mvt	Text	TJL	TKD	Buchner	Faenza	Castell' Arquato	Cavazzoni	Merulo	Gabrieli	Attaingnant	Philip ap rhys¹	Cabezon ²
	3.03	Credo	Et in unum Dominum, unigenitum.	V13		_	_	С	С	С	С	\	_	_
	3.04	Credo	Et ex Patre sæcula.	С		_	_	Org	Org	Org	Org	Org	_	<u> </u>
	3.05	Credo	Deum de Deo de Deo vero.	\	——————————————————————————————————————	_	_	С	С	С	С	С	_	_
	3.06	Credo	Genitum, non factum facta sunt.	\	——————————————————————————————————————	_	_	Org	Org	Org	Org	Org, rpt ¹⁴	_	_
50	3.07	Credo	Qui propter nos de cælis.	Org	——————————————————————————————————————	_	_	С	С	С	С	С	_	_
	3.08	Credo	Et incarnatus factus est.	V15	——————————————————————————————————————	_	-	\	\	\	<u> </u>	Org, C ¹⁶	<u> </u>	_
	3.09	Credo	Crucifixus etiam et sepultus est.	С	——————————————————————————————————————	_	_	Org	Org	Org	Org	С	_	_
	3.10	Credo	Et resurrexit Scripturas.	Org, rpt	T	_	_	С	С	С	С	5	_	_
	3.11	Credo	Et ascendit in cælum Patris.	V	T	_	_	Org	Org	Org	Org	5	_	_
	3.12	Credo	Et iterum venturus non erit finis.	С	†	<u> </u>		С	С	С	C	5	_	<u> </u>

			Pol	lish	Ger.		Italian			Fr.	Eng.	Sp.	
Phrase Number	Item/mvt	Text	TJL	TKD	Buchner	Faenza	Castell' Arquato	Cavazzoni	Merulo	Gabrieli	Attaingnant	Philip ap rhys¹	Cabezon ²
4.05	Sanctus	Osanna in excelsis.	Org	Org	Org	_		<u> </u>	<u> </u>	<u> </u>	\	Org	_
4.06	Sanctus	Benedictus qui venit	С	С	С	_	: -	<u> </u>	-		Org	С	_
4.07	Sanctus	Osanna in excelsis.	Org, rpt	Org, rpt	Org	_	_	_	_	<u> </u>	С	Org	_
5.0118	Agnus Dei	Agnus Dei, qui tollis nobis,	V	—	Org	_	V	V	V	V	Org	C, Org ¹⁹	_
5.02	Agnus Dei	Agnus Dei, qui tollis nobis,	V	<u> </u>	С	_	V	V	V	V	С	С	_
5.03	Agnus Dei	Agnus Dei, qui tollis pacem.	V		Org	_	V	V	V	V	Org	Org	_
6.01		Ite, missa est.	P	P	P	P	P	P	P	P	P	P	P
6.02		Deo Gracias.				<u> </u>					V20	_	_

Sources: Some data adapted from Apel, The History 92–93, 106 & 134; Holton Prouty, "The Italian Organ Mass," 48–56; Early Tudor Organ Music II, ed. Stevens.

¹ The mass does not have a *Credo* but does contain an Offertory. Stevens' determination of alternatim patterns shown in *Early Tudor Organ Music II: Music for the Mass* is based on comparison of the cantus firmi to chants from a 1532 edition of a Sarum gradual; Stevens provides a transcription of the chants in the appendix.

³ This is a troped Kyrie in which the versets' titles correspond to the trope's text and not the typical *Kyrie eleison* or *Christe eleison*. Stevens specifies that "two voices intone *Deus creator omnium*, and the remaining verses are sung by all." *Early Tudor*, xv.

- ⁴ The first mass's *Kyrie* has five versets, with only one for the *Christe*, indicating only one possibility for the alternation. However, *Missa cunctipotens* has six versets total with two for the *Christe*. Apel proposes that the alternation could be OCO OCO (Apel, *The History*, p. 106).
 - ⁵ Regarding repeated organ versets, the Cavazzoni source specifies repetition in the score for the Kyrie. All other repetitions are informed suggestions.
- ⁶ Information for the *Gloria* for all non-Polish sources taken from Willi Apel, *The History of Keyboard Music to 1700*, trans. and rev. Hans Tischler, (Bloomington, IN and London: Indiana University Press, 1972), 93.
 - ⁷ Buchner 2.07: This verset was a polyphonic setting according to Bush, "Organ music," 45.
- ⁸ TKD also contains a *Benedictus* on p. 244, found within a section of intabulations of motets, but the *Sanctus* mass items are found on pp. 318–319, and 344–348. This Benedictus is an intabulation of an Isaac piece published in *Harmonice Musices Odhecaton* (Rome, Petrucci, 1501). Wyatt Insko, "The Cracow Tablature with Transcriptions" (Ph.D. diss., Indiana University, 1964), 108.
- ⁹ Two of the masses by Gabrieli contain a separate verset for the Amen, but the Missa Apostolorum lacks this verset. In the Messa della Beata Virgine, the cantus firmus from the In Gloria Dei verset includes the pitches for the Amen.
- ¹⁰ Mar. Gl. = Marian Gloria. Some organ masses correspond to *Gloria spiritus et alme*, set to multiple melodies and used in masses for feasts related to Mary, the mother of Jesus.
 - ¹¹ The Credo patterns in TJL vary for phrases 13–19. See table 2.8 in ch. 2.
- ¹² Only one mass has a *Credo*. Comparison of the cantus firmus to the chant melody shows that the phrase is divided: The organ verset matches the text *Patrem omnipotentem*, presumably the choir sang *Factorem caeli et terra*, then the subsequent organ verset matches *visibilium omnium et invisibilium*.
- ¹³ The cantus firmus corresponds to phrases 2–3 in the *Patrem* verset on 38v, but only to phrase 2 in all other *Patrem* versets. this affects options for repetition of versets.
 - ¹⁴ The verset for 3.01 can be repeated here for the entire phrase as the chant melody is the same.
- 15 In most *Credo* items, the verset *Qui propter nos* corresponds to this phrase only, ending at the word *caelis*. The verset *Qui propter nos* on fol. 69r continues, and the next phrase (3.08) is divided. The organ verset includes *Et incarnátus est de Spíritu Sáncto* and presumably the choir sang *ex María Vírgine Et hómo fáctus est*.
- ¹⁶ Another divided phrase of text like 3.01. The organ verset matches the text *Et incarnatus*, presumably the choir sang *ex Mariae virginae*, then the subsequent organ verset matches *Et homo*.
 - ¹⁷ The cantus firmus from the lone organ verset corresponds to chant melody for the second and third phrases (Sanctus, Sanctus, Dominus Deus Sabaoth).
- ¹⁸ All Italian sources and TJL provide only one verset for the *Agnus Dei*, and overall scholars agree that the organ played on the first phrase (5.01) and repeated the verset for the third phrase (5.03). However, the possibility of the other configurations cannot be ruled out. Unlike the *Kyrie* (see n. 6 in this table), Cavazzoni does not state *iterum repetitur* here.
- ¹⁹ Verset is divided between choir and organ: choir for the text *Agnus dei*, and organ has a verset titled *qui tollis*. A lone surviving *Agnus Dei* verset by John Redford (from GB-Och 371) corresponds to the chant melody for the text *Agnus dei qui tollis peccata mundi miserere nobis*.
 - ²⁰ One of the two masses has a verset for *Deo gracias*. Missals, which were used by the priest, typically contain the chant for *Ite, missa est*.
- **KEY:** Org = organ verset, C = choir, P = priest or cantor, V = varies, Org, P = repeat an organ verset, V = previous party continues, V = varies or unable to account for the cantus firmus.

Table A.4. Folio Attribution (attr.) to Each Scribe. Unlisted folios are attributed to Primary; blank fields indicate no observation regarding these folios.

	Folios*	Attr. by Fancey	Attr. by Wilkowska- Chominska	Attr. by Wilfring- Albrecht	Attr. by Witkowska- Zaremba	Attr. by Gancarczyk
-	Treatise (fol. 1v- 14r)	Primary (musical examples, annotations to the text) Quaternary/Student (main text of the treatise)	Scribe 4 (fol. 14r) Not specified (1v–13v)	Scribe A (musical examples, annotations to the text) Scribe B (main text of the treatise)	Older (musical examples, their incipits, corrections to the text) Younger (main text of the treatise)	
	1v–27v 7r, end of SIII	Secondary Secondary (annotated correction)	Scribe 2	Scribe A		
(7r, SII–47v, SIV 2r–64v, SI 4v, SII–SV	Secondary Secondary Primary	Scribe 2 (all of 62r–64v)	Scribe A (all of 62r–64v)		
0	66v–67r, SIV 7r, SV 7v–68r, SIII 8r, SIV–V 8v–69r, SII 9r, SIII–69v, SIII 9v, SIII–70r	Secondary Primary Secondary Primary Secondary Primary Secondary Primary Secondary	Scribe 2 (all of 66v–70r)	Scribe A (all of 66v–70r)		
	1v–72v 01r, SIII-101v, SII	Secondary Secondary	Scribe 2	Scribe A		Scribe 2

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Folios*	Attr. by Fancey	Attr. by Wilkowska- Chominska	Attr. by Wilfring- Albrecht	Attr. by Witkowska- Zaremba	Attr. by Gancarczyk
123v, SII–124v, SIII	Secondary				
137v—144r, SIII	Secondary	Scribe 2	Scribe A		
159v—160v	Secondary	Scribe 2	Scribe A		
188r–189r	Tertiary	Scribe 3	Scribe C		
197v–199v	Tertiary	Scribe 3	Scribe C		
259v—260r	Primary (text of <i>Ad</i> faciendam) Quaternary/Student (colophon dated 1547)	Scribe 4	Scribe A (text of <i>Ad</i> faciendam) Scribe B (colophon dated 1547)		

Sources: Data adapted from Wilkowska-Chomińska, introduction to Tabulatura Organowa, 6; Wilfing-Albrecht, "Deutsche Musik in Polen, 23-24; Witkowska-Zaremba, introduction to Tabulatura Joannis, 43; Gancarczyk, "Uwagi Kodykologiczne," 57.

^{*}S = system, designated by Roman numerals to distinguish them from folio numbers, and show division of scripts on the same folio as applicable.

Table A.5. Contents of the Treatise Ad faciendum cantum choralem.

Compo	sitional Concepts within Each Principle	Ex. No.*	Sen. No.*		
Introdu	ction: List of each principle/rule [necessarium]	none	1–9		
Primum	necessarium: Elaboration of the entrances of a chant melody		10-80		
A.	Simultaneous entrance of all four voices				
	Chant in the discantus	1–3			
	Chant in the tenor	46			
	Chant in the bass	7-81			
В.	Entrance at the octave				
	Chant in the discantus	9–11			
	Chant in the tenor	12–14			
	Chant in the bass	15–17			
C.	Entrance of inequality (fifth)				
	Chant in the discantus	18–20			
	Chant in the tenor	21–23			
	Chant in the bass	24–26			
D.	Entrance at the diatesseron (fourth)				
	Chant in the discantus	27–29			
	Chant in the tenor	30–32			
	Chant in the bass	33–35			
	Principles of counterpoint in two voices (bicinia)		81		
F.	List of dissonances		82–90		
Secundu	m necessarium: Voice leading and rhythmic subdivision (tactus)		91–106		
A.	Common mistakes in counterpoint (voice leading)	36–38			
В.	Incorrect subdivision of the tactus	39			
C.	Principles of mensural system in organ music ²				
Tercium	necessarium: Common mistakes in instrumental counterpoint		107-138		
(harmo	nization)				
A.	Interval and voice leading errors in bicinia	40-43			
В.	Fauxbourdon recommended for parallel fourths	44-45			
C.	Correction of parallel fifths and octaves	46-47			
D.	Voice leading errors at cadences	48–51			
E.	Voice leading errors between bass and tenor in bicinia	52–53			
Quarta necessarium: Variety in harmonizing repeating melodic intervals			139–149		
Quinta necessarium: Relationship between text and structure			150–165		
A. Alignment of inner cadences with phrases of text.					
B. Migration of the cantus firmus among voices					
Sexta necessarium: Rhythmic variation in voice leading none 166–169					
Course I	Osta adapted from Withouseles Zaromba Takulatura Isamis de Lublin	21 22			

Source: Data adapted from Witkowska-Zaremba, Tabulatura Joannis de Lublin, 31–32.

¹ An empty staff titled *Tertium exemplum in cantu* on fol. 3r indicates a third example was planned.

^{*} Ex. Nr. (Example Number) and Sen. Nr. (Sentence Number) correspond to Witkowska-Zaremba's numbering in the source.

² Witkowska-Zaremba notes that the mensural terminology used here does not agree with other sixteenth-century tablatures and provides a conversion chart for rhythmic values between Hans Buchner's *Fundamentum* and TJL (*Tabulatura Joannis de Lublin*, 51).

APPENDIX B

FIGURES

The two Credo chants MZG531B and MZG33B, discussed in ch. 2, are provided in their entirety in the figures below. In their original sources both chants are written rhythmically with stemmed notes in a Cracovian variant of Messine-Gothic notation, popular in the fifteenth and sixteenth centuries in southern Poland. In the scores shown in figures B.1 and B.2, the punctum in the original is converted to a quarter note and stemmed punctum to the eighth note. Tenuto marks indicate a cephalicus in the original. Ties show two connected puncta; these generally occur at the end of a text phrase. The listener can hear a performance of these rhythmic chants in the choir's portions of tracks 7 (MZG531B) and 9 (MZG33B).

The first chant, MZG531B, has a distinctive opening motive (F3, C3, F3, B-flat3) built on the fourth. The repetition of phrases is very regular and has the pattern ABCD AC ABCD AB. Phrases A and C divide into four subphrases each, whereas B and D subdivide into two. Subphrases always end with two connected puncta. In some cases, for example *Per quem omnia facta sunt*, a melismatic syllable spans two subphrases. The repetition of phrase A, whose melody corresponds to the versets *Patrem* and *Qui propter nos* in TJL, suggests that each verset could be repeated at *Et resurrexit* and *Et unam sanctam catholicam*.

¹ Janka Szendrei concluded that the notation in Cracovian sources have stylized features from both Gothic and Messine German notation and specifically mentions PL-Kj-1267 and PL-Kk-44, the sources of chants notated in figures B.1 and B.2 respectively, in "Staff Notation of Gregorian Chant in Polish Sources from the Twelfth to the Sixteenth Century" in *Notae musicae artis: Musical Notation in Polish Sources*, 11th–16th Century, ed. Elżbieta Witkowska-Zaremba (Kraków: Musica Jagellonica, 2001), 218–219.

Figure B.1. Transcription of Credo Chant MZG531B from PL-Kj-1267, fols. 194r–195r.



(Figure B.1. continued)



The second chant, MZG33B, has many repeating subphrases. I assigned labels to repeating subphrases in order of appearance; the two fragments that do not repeat are labeled x (first page, first staff) and y (second page, last staff) to distinguish them from the rest. The subphrases do not neatly combine into larger sections as seen in MZG531B. The chant is built around four primary subphrases a, b, d, and f which recur in various combinations. Subphrases c, e, and g are often inserted between the four primary subphrases. One major section comprises subphrases fadbdbd, used for *Deum de deo . . . facta sunt* and *et conglorificatur . . . apostolicam ecclesiam.* The section *ex Maria virgine . . . passus et supultus est* also has this structure, with the insertion of subphrase c for the text *Pilato*. The opening descending fourth motive, which is prominently featured in the *Patrem* versets based on this chant, never recurs; it would not be possible to repeat this verset at a later point if matching the cantus firmus to the text is the highest priority.

Figure B.2. Transcription of Credo Chant MZG33B from PL-Kk-44, fols. 52v-54v.



(Figure B.2. continued)



(Figure B.2. continued)



APPENDIX C

CONCERT RECORDING

This dissertation is supplemented with a recording of a live concert of the three mass cycles from TJL; a permanent URL for the recording was not available in advance of publishing of this dissertation. The recording is available through ProQuest and NC DOCKS (https://libres.uncg.edu/ir/uncg/); a search by author's last name at NC DOCKS should provide links to free access of the dissertation and recording.

The details of the collaboration with Dr. hab. Susi Ferfoglia and Flores Rosarum on this concert are given in the preface, along with an explanation of a significant change in the second mass. As previously mentioned, some performance decisions may intentionally differ with the conclusions in this dissertation because the research was ongoing. At the time of the concert I was hesitant to repeat versets too frequently because a performance of all three masses consecutively could have been challenging to the twenty-first century listener. However, based upon the audience feedback, going forward I will more closely follow the patterns given in the dissertation.

In the *Credo* from the second mass *de Domina* (track 7), I intentionally repeated each verset when the cantus firmus aligned with the pitches in the texts *Et resurrexit* and *Et unam sanctam catholicam* (phrases 10 and 15). The reasons for this are discussed further in sec. 2.2 in ch. 2; the listener can also refer to figure B.1 in appendix B to follow the chant while listening to track 7. The interaction between choir and organ is much more satisfactory in this *Credo* than in the one from the third mass *Officium Sollemne* (track 12, see figure B.2). Although not noted in the program, the final *Osanna* in the second mass *de Domina* is a repeat

of the *Sanctus Tercium*; this mass lacks a separate verset for the *Osanna*, but the chant's melody in the phrase 3 (*Sanctus* . . . *Sabaoth*) is the same in the phrases 5 and 7 (*Osanna in excelsis*).

The organ at Holy Cross Catholic Church in Krakow has a temperament based on the treatise *Ad Jaciendam correcturam* from the Johannes of Lublin Tablature; this temperament is one possible solution to the rather general tuning instructions in this treatise. Although the organ dates from 1704, Marcin Szelest and I chose stop registrations to approximate what is known about the Renaissance organ in Poland. The existence of a pedal trumpet stop is documented in multiple primary sources thus, I often used the 8' Puzan to solo out the cantus firmus. Also notable is the Cymbal stop, unique to Polish organs. This stop is essentially an untuned mixture—a chorus of small pipes mounted in a common metal or wooden foot. It produces a high-pitched percussive sound, much like crashing cymbals. This stop can be heard in the fourth organ verset (a repetition of the *Patrem* from *de Domina*) in track 7 and in the first verset of track 13 (*Sanctus* from *Officium Sollemne*). Additionally, the organ was manually pumped for the wind supply (as opposed to using the electric blower).

This is a live recording that, for the most part, has not edited out note errors. However, due to some technical difficulties, some portions of the live recording were replaced with their equivalents from a separate recording session made on June 19, 2018, also at Holy Cross Catholic Church; they are marked with an asterisk in the copy of the concert program on p. 165. This recording session used the electric motor for the organ's wind supply; some listeners may notice a difference between these portions and the live concert.

⁴ Jerzy Golos, "Some Rare Technical Features Found in the Historic Organs of Poland," *The Organ Yearbook* 10 (January 1, 1979): 34-47.

About the Concert

Msze Organowe z Tabulatury Jana z Lublina [The Organ Masses from the Johannes of Lublin Tablature]
May 29, 2018
Holy Cross Catholic Church, Krakow, Poland
Marya Fancey, organ
Flores Rosarum, choir
Dr. hab. Susi Ferfoglia, artistic director
Adrianna Bujak
Maria Klich,
Katarzyna Śmiałkowska

Recording Contents

Katarzyna Wiwer Łukasz Laxy, cantor

Each mass component is grouped into one track, although they comprise multiple organ versets alternating with the choir. Organ verset titles and choir text are listed individually in the program provided on p. 165. Some individual organ versets have been replaced with a later recording, as mentioned in the preface; these are marked on the program.

1.	Kyrie from [Missa] Officium per octavas	5:42
2.	[Gloria] from [Missa] Officium per octavas	6:29
3.	Sanctus per octavas from [Missa] Officium per octavas	3:38
4.	Agnus Dei from [Missa] Officium per octavas	3:13
5.	Kirie [sic] from [Missa] de Domina	4:25
6.	[Gloria] from [Missa] de Domina	6:32
7.	[Credo] from [Missa] de Domina	8:06
8.	Sanctus per octavas from [Missa] de Domina	4:23
9.	Agnus Dei from [Missa] de Domina	2:13
10.	Kirie fons bonitatis* from [Missa] Officium Sollemne	7:57
11.	[Gloria] from [Missa] Officium Sollemne	6:31
12.	[Credo] from [Missa] Officium Sollemne	6:40
13.	Sanctus Sollemne in G from [Missa] Officium Sollemne	5:47
14.	Agnus Dei from [Missa] Officium Sollemne	3:05

Concert Program, front and back cover.

Wykonawcy:

Marya Fancey, organy

Flores Rosarum, chór [Adrianna Bujak, s. Susi Ferfoglia (kierowniczka artystyczna), Maria Klich, Katarzyna Śmiałkowska, Katarzyna Wiwer]

Łukasz Laxy, kantor

Gorąco dziękuję moim kolegom wykonawcom za ich czas i pracę nad tym projektem, a także Arturowi Szczerbininowi za pomoc z registracją i Michałowi Wolanowi za kalikowanie organów. Szczególne podziękowania należą się księżom, pracownikom i parafii św. Krzyża za goszczenie koncertu i udostępnienie organów na próby. Serdecznie dziękuję prof. dr. hab. Marcinowi Szelestowi i prof. dr hab. Elżbiecie Witkowskiej-Zarembie za kierowanie moimi badaniami.

I warmly thank my fellow performers for donating their time and work to this project; Artur Szczerbinin for assistance with registration changes; Michał Wolan for serving as calcant, and the priests, staff, and parish of św. Krzyża (Church of the Holy Cross) for graciously hosting the concert and rehearsals. Heartfelt thanks to Dr. Marcin Szelest and Dr. Elzbieta Witkowska-Zaremba for their guidance on my performance and research throughout the project.

Koncert ten był możliwy dzięki stypendium USA Student Scholar z Fulbright-Polska. This concert was made possible by a US Student Scholar grant from Fulbright-Polska.



Msze Organowe z Tabulatury Jana z Lublina



Czwartek, 29 V 2018 — 19:00 Kościół pw. Świętego Krzyża w Krakowie Plac Świętego Ducha **Concert Program, interior pages.** * = Replacement of entire organ verset with a new recording taken from a recording session on June 19, 2018, also at Holy Cross Catholic Church. *Missa de Dominica* is actually *Missa de Dominia*, but I did not find enough evidence to support a name change until 2019.

1. Officium per octavas		2. Missa de Dominica		Organy	[Et unam sanctam catholicam]	Organy <i>Chór</i>	Qui sedes ad dexteram* Quoniam tu solus Sanctus
Organy	Kyrie Primum*	Organy	Kyrie Primum	Chór	Et expecto resurrectionem		~
Chór	Kyrie eleison	Chór	Kyrie eleison		1	Kantor	Credo in unum Deum
Organy	Tercium Kyrie	Organy	Secundum Kyrie	Organy	Sanctus per octavas	Organy	Patrem Sollemne
Chór	Christe eleison	Chór	Christe eleison	Chór	Sanctus	Chór	Et in unum Dominum
Organy	Criste eleyson	Organy	Christe	Organy	Sanctus Tercium		nostrum Jesum Christum
Chór	Christe eleison	Chór	Christe eleison	Chór	Pleni sunt cæli	Organy	Qui propter nos
Chór	Kyrie eleison	Chór	Kyrie eleison	Organy	Osanna in excelsis*		homines
Organy	Ultimum Kyrie	Organy	Kyrie Ultimum			Chór	Et incarnatus est
Chór	Kyrie eleison	Chór	Kyrie eleison	Chór	Agnus Dei		
				Organy	Agnus Dei	Organy	Sanctus Sollemne In G
Kantor	Gloria in excelsis Deo	Kantor	Gloria in excelsis Deo	Chór	Agnus Dei	Chór	Sanctus
Organy	Et in terra pax	Organy	Et in terra pax			Organy	Sanctus Tercium
Chór	Gratias agimus tibi	Chór	Gratias agimus tibi			Chór	Pleni sunt cæli
Organy	Domine Deus Agnus Dei	Organy	Domine Deus Agnus	3. Offic	ium Sollemne	Organy	Osanna in excelsis
Chór	Qui tollis peccata mundi		Dei, Filius Patris			Chór	Benedictus
Organy	Qui sedes ad dexteram	Chór	Qui tollis peccata mundi	Organy	Kyrie fons bonitatis	Organy	Osanna in excelsis
	Patris	Organy	Qui sedes ad dexteram	Chór	Kyrie fons bonitatis		
Chór	Quoniam tu solus Sanctus		Patris	Organy	Tercium Kyrie*	Chór	Agnus Dei
		Chór	Quoniam tu solus Sanctus	Organy	Criste eleyson	Chór	Agnus Dei
Organy	Sanctus per octavas			Chór	Criste unice de patris genite	Organy	Agnus Dei in G per B
Chór	Sanctus	Kantor	Credo in unum Deum	Organy	Criste eleyson		
Organy	Sanctus Tercium	Organy	Patrem (per octavas N.C.	Organy	Ultimum Kyrie		
Chór	Pleni sunt cæli		1540)	Chór	Kyrie ignis divine		
Organy	Osanna in excelsis	Chór	Et in unum Dominum	Organy	Ultimum Kyrie		
Chór	Benedictus		nostrum Jesum Christum				
		Organy	Qui propter nos	Kantor	Gloria in excelsis Deo		
Organy	Agnus Dei *		homines	Organy	Et in terra pax*		
Chór	Agnus Dei	Chór	Ex Maria Virgine	Chór	Gratias agimus tibi		
Organy	Agnus Dei	Organy	[Et resurrexit]	Organy	Domine Deus Agnus Dei		
		Chór	Et iterum venturus est	Chór	Qui tollis peccata mundi		

About the Organ at Holy Cross Church

Dokonane w roku 1995 pierwsze oględziny organów w kościele Świętego Krzyża przyniosły zatrważające wyniki: przerobiona została dolna część szafy organowej, by mogła pomieścić wielką wiatrownicę; pozostała część szafy zaatakowana była przez niebezpieczny rodzaj drewnojada (kołatek), zaś piszczałki, pochodzące z różnych epok, sporządzone były z rozmaitych materiałów. Całość instrumentu znajdowała się w bardzo złym stanie, nie wyłączając stożkowych wiatrownic, pneumatycznej traktury i kontuaru, pochodzących prawdopodobnie z roku 1927, kiedy to dokonano poważnej przebudowy organów. Mgr Jacek Kulig z Krakowa przebadał źródła historyczne odnoszące się do instrumentu, zachowało się jednak niewiele szczegółów, dotyczących chociażby pierwotnej jego dyspozycji. Nieznane też było ani nazwisko budowniczego, ani data powstania organów. Szczęśliwie podczas intonacji odkryto wewnątrz największej prospektowej piszczałki inskrypcję: "1704 Ultimis diebus Feb.[ruarii]" – "w ostatnich dniach lutego 1704 r."

Szafa organowa została odrestaurowana przez polskich rzemieślników. Obecne organy są możliwie najwierniejszą rekonstrukcją pierwotnego układu instrumentu, który wyposażony był w dwa manuały z podwieszonym pedałem. Z uwagi na rolę organów we współczesnej liturgii, instrument powiększono o nową pięciogłosowa, wolno stojąca sekcję pedału. Organy otrzymały też dwa nowe miechy klinowe, obsługiwane przez kalikanta lub dmuchawe elektryczna, nowe wiatrownice tonowo-zasuwowe typu szpuntowego oraz mechaniczną trakturę, zarówno gry (typu "zawieszonego"), jak i rejestrów. Zainstalowano także wbudowany w szafe stół gry z dwoma manuałami (klawisze diatoniczne pokryte hebanem, z ozdobami na ściankach czołowych, klawisze chromatyczne z wyłożonej kością białej buczyny) i dębową klawiaturą nożną. Zanalizowano system menzuracji oryginalnych głosów i według niego sporządzono wszystkie nowe piszczałki. Oryginalne piszczałki metalowe zrobione zostały ze stopu zawierającego 84,1% ołowiu, 8,65% cyny, oraz miedź, antymon i domieszkę srebra. Wszystkie nowe piszczałki metalowe wykonano z identycz-

Richard Jacoby (Kassel, Niemcy) sporządził wstępny raport, przeprowadził badania, zinwentaryzował piszczałki, opracował wstępny projekt i odrestaurował piszczałki Cymbału. Firma Ekkehart Gross Orgelbau (Waditz, Niemcy) wykonała wszystkie nowe elementy, odrestaurowała pozostałe głosy, zainstalowała i zintonowała instrument.

Dziękujemy za współpracę komisji, w pracach której brał udział ks. dr Jan Abrahamowicz, proboszcz parafii św. Krzyża, a także członkowie Katedry Organów Akademii Muzycznej w Krakowie: prof. Mirosława Semeniuk-Podraza, mgr Jacek Kulie i ad. Marcin Szelest. Szczególne podziękowania kierujemy na ręce mgr. Sebastiana Adamczyka za pomoc we wprowadzeniu w tych organach – po raz pierwszy w Polsce – temperacji stroju według ta-bulatury Jana z Lublina.

Richard Jacoby



THE HISTORICAL ORGAN AT HOLY CROSS CHURCH, CRACOW

A first inspection of the Holy Cross instrument in 1995 gave a shattering result: the lower part of the case was cut out to make room for a big windchest, the remaining casework was infected by anobiae, a dangerous species of wood-worms, the pipework consisted of different materials from different periods, the instrument as a whole was in a complete disarray and very bad condition, including the cone windchests, the tubular pneumatic action and the keyboard, probably installed during a major

alteration of the organ in 1927. Written sources concerning the organ's history had been evaluated by Mr. Jacek Kulig, Cracow, but reliable details about e.g. the original stop specification were scarce. Neither the builder's name nor the date of the organ's origin were known. By pure chance, however, an inscription was discovered during the tonal finishing inside the largest front pipe, reading: '1704 Ultimis diebus Feb. [ruarii]', that is: 'During the last days of February 1704.'

The casework has been restored and preserved by Polish craftsmen. The present organ is a reconstruction as close as possible to its original configuration with two manual divisions only, equipped with pedal pull-downs at most. Considering its permanent role in today's liturgy, the instrument was enlarged with a new pedal division, unenclosed, containing five stops. Furthermore the organ received two new, workable, wedgeshaped bellows, alternatively combined with an electric blower, new sponselled slider chests, suspended key action as well as mechanical stop action. Attached keydesk with two manuals (ebony-covered naturals with scribings and decorated key fronts, sharps of bone-covered white beech) and pedalboard of oak. The scaling system of the original stops was analyzed and all new pipes are scaled corresponding to that. The original metal pipes were made of an alloy containing 84,1% of led, 8,65% of tin as well as copper, antimon and traces of silver. Consequently all new metal pipes are made of the same alloy as the original ones.

The prerestoration report, research, inventory of pipes, draft design as well as the restoration of the Polish Cymbał pipes was carried out by Richard Jacoby, Kassel (Germany). All new parts were crafted by Ekkehart Gross Orgelbau, Waditz (Germany), who also carried out the restoration of the remaining pipework, the installation and the tonal finishing.

Many thanks to the members of the organ committee for their cooperation: Dr. Jan Abrahamowicz, Parish Pastor, and the faculty members of the Organ Division, Academy of Music, Cracow: Prof. Mirosława Semeniuk-Podraza, Mr. Jacek Kulig, M. A., and Mr. Marcin Szelest, D. Mus. Special thanks to Mr. Sebastian Adamczyk, M. A., of Warsaw (Poland), for his efforts and assistance to re-introduce the Jan of Lublin temperament with this organ for the first time in Poland.

Richard Jacoby

Stoplist of the Organ at Holy Cross Church

Dyspozycja Specification (2003)

Manuał (I)

CDEFGA-c" 45 klawiszy, krótka oktawa 45 notes, short octave

Pryncypał 8' (1704)

powlekany srebrem, w całości w prospekcie silver-plated, all in façade

Flet major 8' (1704)

Octava 4' (1704)

Gemshorn 4' (2003)

zrekonstruowany reconstructed

Sedecima 2' (1704)

Mixtura IV-V (2003)

zrekonstruowana reconstructed

Cymbał XI (1704) Polish type

Pozytyw (II)

CDEFGA-c'" 45 klawiszy, krótka oktawa 45 notes, short octave

Flet 8' (1704)

drewniany wood

Pryncypał 4' (1704)

powlekany srebrem, F-h' w prospekcie silver-plated, F-b' in façade

Quinta 3'

koniczna, koniec XVIII w.? tapered, late 18th century?

Octava 2' (2003)

Tertia (2003)

Quinta Minor 11/2' (2003)

Tremulant

Pedał

CDEFGA-d' 23 klawisze, krótka oktawa 23 notes, short octave

Sub-Bas 16' (2003)

Pryncypał 8' (2003)

drewniany wood

Quinta Major 6' (2003)

Octava 4' (2003)

Puzan 8' (2003)

drewniane stopy, metalowe rezonatory wooden boots, resonators of metal

Połączenie szufladkowe manuałów Shove coupler

Połączenie I/P Pedal coupler I/P

Calcant Bellows signal

Wysokość stroju Pitch: a=465 Hz przy at 15°C

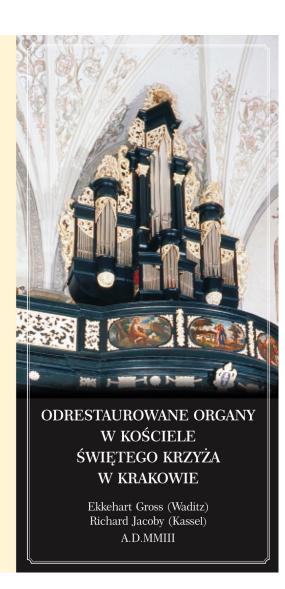
Temperacja stroju według opisu zawartego w tabulaturze Jana z Lublina (ok. 1540 r.) Unequal temperament according to the system described in the Jan of Lublin tablature (ca. 1540)

Ciśnienie powietrza Wind pressure: 70 mm = 23/4"



Inskrypcja odkryta wewnątrz największej piszczałki prospektowej

Parafia Świętego Krzyża 31-023 Kraków, ul. Św. Krzyża 23 tel. +48 (12) 429 20 56 Poland



Concert Program Notes in English

The Organ Masses from the Jan of Lublin Tablature

The Jan of Lublin Tablature (ca. 1540) is one of the most valuable cultural artifacts from Poland. This manuscript, compiled by its namesake, contains the largest collection of European organ music from the first half of the sixteenth century. The manuscript uses a format called Old German organ tablature in which the discantus (equivalent to the soprano) is on a staff but the alto, tenor, and bass are indicated by letters in a chart format. The secular and sacred compositions include dances; intabulations of songs, motets, and madrigals; preludes; and liturgical music comprised of versets for mass ordinaries, hymns, sequences, introits, psalm tones, doxologies, and magnificat versets.

This music originates from a time when the organ and choir performed the Catholic mass in alternatim, a practice which ceased in the early-twentieth century. The organ and choir alternate between verses of texts for the sung prayers in the mass. For example, the organ plays a verset for the text *Osanna in excelsis* and the choir sings the subsequent text *Benedictus qui venit in nomine domini*. The portions in this concert are for the Mass Ordinary—the same text was used for every mass, hence the name "ordinary." There are five parts: Kyrie, Gloria, Credo, Sanctus, and Agnus Dei.

The Catholic mass was original a vocal-only form in which the choir chanted the prayers. Over time, multi-voice (polyphonic) choral settings emerged. By the fifteenth century organ versets could be substituted for the polyphonic choral settings or chant. These organ versets contain a cantus firmus—the pitches of the chant form the basis of the organ music. In my research on the organ masses from the Jan of Lublin Tablature, I compared the organ versets to multiple Polish graduals (liturgical books containing the chant texts and melodies). Tonight, the choir will be singing a version of the chant from the 1506 Gradual of Jan Olbracht from Krakow, with the exception of one Credo not found in this source. That chant is found in an earlier, fifteenth-century gradual, also from Krakow.

The musical aesthetics of the Renaissance highly valued color—which could be achieved through the choice of harmonies and the sounds of the instruments. At this time, tuning systems were different than today; some chords sounded more pure in tuning than others. Alternation between the most purely tuned chords and more dissonant chords creates musical interest not possible on an equal temperament instrument in which all chords are equally impure. We do not know the exact tuning (or tunings) that Jan of Lublin would have known; tuning instructions are in the Lublin Tablature, but multiple solutions are possible. The organ at Church of the Holy Cross, which originates from 1704, is tuned according to one possible solution so you will be able to experience the shifting kaleidoscope of chord color between more pure and less pure chords.

In addition to the colors within the music itself, changes of registration (sound combinations of different organ stops) also create variety. We don't know the sounds and tonal colors possible on a Polish organ from the first half of the sixteenth century because none survive. We can safely assume that a clear sound would be the best for this multiple-voice music. The registrations on today's concert solo out the cantus firmus for almost every verset—a conscious decision on my part for those who would be unfamiliar with liturgical plainchant. Existing evidence strongly suggests that Polish organs of the Renaissance had a separate pedalboard and that some of the music in the Lublin Tablature was intended for manuals and pedals. Use of the pedalboard also increases the number of options possible in registration. Most of the combinations you will hear tonight will only be used once for one verset.

The organ music of the early Renaissance overall, and of Poland in particular, is largely unknown to the general public. May you find this concert a refreshing anecdote to the busy pace of modern life.

Marya Fancey Krakow, May 29, 2018

Concert Program Notes in Polish

Msze Organowe z Tabulatury Jana z Lublina

Tabulatura Jana z Lublina, która powstała około 1540, jest jednym z najcenniejszych zabytków z Polski. Ten rękopis zawiera największą kolekcję muzyki organowej Renesansu przed 1550 i został zapisany notacją literową z najwyższym głosem (sopran) umieszczonym na wielolinii. W tej tabulaturze jest wiele różnych gatunków muzycznych, takich jak tańce, aranżacje motetów, pieśni świeckie i muzyka liturgiczna. Ta ostatnia obejmuje wersety mszalne.

Wówczas msza była śpiewana przez chór, czasami z organami. Kiedy korzystano z organów, chór i organy wykonywały tekst mszy na przemian. Na przykład w odcinku *Sanctus* organy grają fragment tekstu "*Osanna in excelsis*", potem chór śpiewa chorał gregoriański do tekstu "*Benedictus qui venit in nomine domini.*"

Warto zwrócić uwagę, że melodia chorału zmieniła się przez te wszystkie lata. Dzisiaj Flores Rosarum śpiewa wersję chorału znalezioną w graduale Olbrachta z roku 1506, z wyjątkiem jednego Credo, które pochodzi z graduału z XV w. Porównałam wersety organowe z graduałami, i każdy werset zawiera dźwięki chorału pokrywające się z odpowiednim tekstem. Organy "śpiewają" więc tekst jak chór. Melodia używana w ten sposób w częściach organowych nosi nazwę *cantus firmus*.

Usłyszymy różne zestawienia barw. W Renesansie różnorodność barwowa była bardzo ceniona, ale nie znamy dokładnie brzemienia ówczesnych polskich organów. Możemy założyć, że trzeba używać jasnych barw , bo ta muzyka jest polifoniczna. Prawie zawsze wyróżniam cantus firmus inną registracją, ponieważ dzisiaj nie znamy dobrze chorału gregoriańskiego. Ówcześni organiści czynili tak samo. Wiemy, że organy renesansowe w Polsce prawdopodobnie miały klawiatury pedałowe, i wiele wersetów daje się wykonać z pedałem. Korzystam z pedału często, bo umożliwia to większe zróżnicowanie zestawów barwowych.

Uważam, że dialog między organami i chórem jest kontemplacyjny. Mam nadzieję, że ten koncert będzie dla państwa duchowym i regenerującym doświadczeniem.

Marya Fancey Kraków, 29 maja 2018

APPENDIX D

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Kraków, 21.06.2019r.

Szanowna Pani Marya Fancey University of North Carolina The College of Visual and Performing Arts

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2 mpronouri brownley,

DYREKTOR

O. Flydolphor

dr Agnieszka Fluda-Krokos

s. dr hab. Susi Ferfoglia, prof. UPJPII Uniwersytet Papieski Jana Pawła II w Krakowie

OŚWIADCZENIE

Niżej podpisana, Susi Ferfoglia, kierownik żeńskiego zespołu wokalnego Flores Rosaum,

oświadczam,

że zapoznałam się z nagraniem "Msze Organowe z Tabulatury Jana z Lublina" w wykonaniu p. Maryi Fancey, 29 maja 2018 w kościele pw. Św. Krzyża w Krakowie i wyrażam zgodę na jego opublikowanie.

Z wyrazami szacunku

Jusi Ferpoglia

Kraków, 2 grudnia 2019